

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: October 5, 2005, 10:23:10 ; Search time 5 Seconds  
(without alignments)  
2.734 Million cell updates/sec

Title: US-09-920-033-3\_1-5000  
Perfect score: 14121  
Sequence: 1 attccaccgggacctgcgg.....agttttattgtatcata 14121

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 0.5

Searched: 19 seqs, 484 residues

Total number of hits satisfying chosen parameters: 38

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 23 summaries

Database : estdb:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	48.4	0.3	50	1	ACCESSION: AUI03654
2	48.4	0.3	50	1	ACCESSION: AUI03655
3	48.4	0.3	50	1	AUI03656
4	45.8	0.3	50	1	AUI03653
5	20.6	0.1	27	1	AZ404206
6	19	0.1	24	1	AZ779573
7	17.2	0.1	22	1	AZ473398
8	16.4	0.1	50	1	AUI03654
9	15.8	0.1	21	1	AZ831993
10	15.4	0.1	20	1	AZ5829
11	15.2	0.1	20	1	ACCESSION: AZ368917
12	15	0.1	19	1	BM401275
13	14.8	0.1	50	1	ACCESSION: AUI03655
14	14.8	0.1	50	1	AUI03656
15	14	0.1	18	1	BM400305
16	14	0.1	18	1	ACCESSION: BM400816
17	13.8	0.1	13	1	AUI03653
18	13	0.1	50	1	ACCESSION: AJ587382
19	13	0.1	15	1	BM399662
20	13	0.1	17	1	BM395730
21	13	0.1	17	1	BM400706
22	12.8	0.1	17	1	ACCESSION: AJ594642
23	12.4	0.1	16	1	ACCESSION: BM401358

ALIGNMENTS

RESULT 1  
AUI03654  
LOCUS AUI03654 50 bp mRNA linear EST 28-JAN-2004  
DEFINITION AUI03654 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone HEP16577, mRNA sequence.

ACCESSION AUI03654  
VERSION AUI03654.1 GI:13553175  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1 (bases 1 to 50)  
AUTHORS Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.  
TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites  
JOURNAL EMO Rep. 2 (5), 388-393 (2001)  
MEDLINE 21270072  
PUBMED 11375929  
COMMENT Contact: Yutaka Suzuki  
Department of Virology  
Institute of Medical Science, University of Tokyo  
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
Email: ysuzuki@ims.u-tokyo.ac.jp  
Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).  
FEATURES  
source  
Location/Qualifiers  
1..50  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
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/clone\_lib="HEP16577"  
/clone\_lib="Sugano Homo sapiens cDNA library"  
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Best Local Similarity 98.0%; Pred. No. 6.3e-06;  
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 1 ATTCACCGGGACCTGCGGGCTGAGTGCCTTCTCGTTGCTGCCGCT 50  
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Db 1 ATTCACCGGGACCTGCGGGCTGAGTGCCTTCTCGTTGCTGCCGCT 50  
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RESULT 2  
AUI03655 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone HEP18075, mRNA sequence.  
LOCUS AUI03655 50 bp mRNA linear EST 28-JAN-2004  
DEFINITION AUI03655 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone HEP18075, mRNA sequence.  
ACCESSION AUI03655.1 GI:13553176  
VERSION AUI03655.1  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1 (bases 1 to 50)  
AUTHORS Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.  
TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites  
JOURNAL EMO Rep. 2 (5), 388-393 (2001)  
MEDLINE 21270072  
PUBMED 11375929  
COMMENT Contact: Yutaka Suzuki  
Department of Virology  
Institute of Medical Science, University of Tokyo  
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
Email: ysuzuki@ims.u-tokyo.ac.jp  
Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).  
FEATURES  
Location/Qualifiers



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Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db 1 ATTTCCACCGGACCTGCGGGCTGAGTCCCTTCTCGGTTCGTCGCGCT 50

RESULT 3
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LOCUS      50 bp mRNA linear EST 28-JAN-2004
DEFINITION Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
ACCESSION AU103656
VERSION    AU103656.1 GI:13553177
KEYWORDS   EST.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 50)
AUTHORS   Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J.,
            Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K.,
            Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
            Diverse transcriptional initiation revealed by fine, large-scale
            mapping of mRNA start sites
            EMBO Rep. 2 (5), 388-393 (2001)
            149-156 (1997).

TITLE      Mapping of mRNA start sites
JOURNAL    EMBO Rep. 2 (5), 388-393 (2001)
MEDLINE    21270072
PUBMED     11375929
COMMENT    Contact: Yutaka Suzuki
            Department of Virology
            Institute of Medical Science, University of Tokyo
            4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
            Email: yusuzuki@ims.u-tokyo.ac.jp
            Sugano, S. Construction and characterization of a full
            length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
            149-156 (1997).

FEATURES   source
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Best Local Similarity 95.9%; Pred. No. 2.3e-05;
Matches 47; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATTTCCACCGGACCTGCGGGCTGAGTGCCTTCTCGGTTCGTCGCGC 49
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Db 2 ATTTCCACCGGTACTGCGGGCTGAGTGCCTTCTCGGTTCGTCGCGC 50

RESULT 5
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LOCUS      50 bp DNA linear GSS 03-OCT-2000
DEFINITION clone UUGC1M017120 F, genomic survey sequence.
ACCESSION AU103656
VERSION    AU103656.1 GI:10528219
KEYWORDS   GSS.
SOURCE     Mus musculus (house mouse)
ORGANISM   Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE  1 (bases 1 to 27)
AUTHORS   Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,
            Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,
            Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von
            Niederhausern, A. and Wright, D., Weiss, R.
            Mouse whole genome scaffolding with paired end reads from 10kb
            plasmid inserts
            Unpublished (2000)
            Contact: Robert B. Weiss
            University of Utah Genome Center
            University of Utah
            Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
            84112, USA
            Tel: 801 585 5606
            Fax: 801 585 7177
            Email: ddunn@genetics.utah.edu
            Insert Length: 10000 Std Error: 0.00
            Plate: 0172 row: 1 column: 20
            Seq primer: CGTTGTAACACGACGCCAGT
            Class: plasmid ends
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/clone_lib="Mouse 10kb plasmid UUGC1M library"
/notes="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match      0.1%; Score 20.6; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 1;
Matches 23; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 168 CTGCTGCTGCTGCTGCTGCTGCTGCTG 194
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Db 1 CTGCTGCTGCTGCTGCTGCTGCTGCTG 27

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RESULT 6
AZ779573/c
LOCUS
DEFINITION
2M0016K09F Mouse 10kb plasmid UUGC1M library Mus musculus genomic
clone UUGC2M0016K09 F, genomic survey sequence.
ACCESSION
AZ779573
VERSION
AZ779573.1 GI:12910362
KEYWORDS
GSS.
SOURCE
Mus musculus (house mouse)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 24)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von
Niederhausern,A. and Wright,D.,Weiss,R.
TITLE
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL
Unpublished (2000)
COMMENT
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0016 row: K column: 09
Seq primer: CGTTGTAACGACGCCAGT
Class: plasmid ends
High quality sequence stop: 24.
FEATURES
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Location/Qualifiers
/organism="Mus musculus"
/mol_type="genomic DNA"

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/db_xref="taxon:10090"
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/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
/notes="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gi|4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match      0.1%; Score 19; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.5;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCTG 194
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Db 23 GCTGCTGCTGCTGCTGCTG 5

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RESULT 7
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DEFINITION
1M0289G18F Mouse 10kb plasmid UUGC1M library Mus musculus genomic
clone UUGC1M0289G18 F, genomic survey sequence.
ACCESSION
AZ473398
VERSION
AZ473398.1 GI:10631523
KEYWORDS
GSS.
SOURCE
Mus musculus (house mouse)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 22)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von
Niederhausern,A. and Wright,D.,Weiss,R.
TITLE
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
JOURNAL
Unpublished (2000)
COMMENT
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0289 row: G column: 18
Seq primer: CGTTGTAACGACGCCAGT
Class: plasmid ends
High quality sequence stop: 22.
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/mol_type="genomic DNA"
/db_strain="C57BL/6J"

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 /clone\_lib="Mouse 10kb plasmid UUGC1M library"  
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Query Match 0.1%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 2.8;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2782 CAAATATGGCATCATCTCC 2803  
 Db 1 CACATATGGCATCATCTCC 22

RESULT 8  
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 LOCUS 50 bp mRNA linear EST 28-JAN-2004  
 DEFINITION Sugano Homo sapiens cDNA library Homo sapiens cDNA clone  
 HEP16577, mRNA sequence.  
 ACCESSION AUI03654  
 VERSION AUI03654.1 GI:13553175  
 KEYWORDS EST.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
 Authors Suzuki.Y., Taira.H., Tsunoda.T., Mizushima-Sugano.J., Sepe.J.,  
 Hata.H., Ota.T., Isoqai.T., Tanaka.T., Morishita.S., Okubo.K.,  
 Sakaki.Y., Nakamura.Y., Sugano.A. and Sugano.S.  
 Title Diverse transcriptional initiation revealed by fine, large-scale  
 mapping of mRNA start sites  
 JOURNAL EMBO Rep. 2 (5), 388-393 (2001)  
 MEDLINE 21270072  
 PUBMED 11375929  
 COMMENT Contact: Yutaka Suzuki  
 Department of Virology  
 Institute of Medical Science, University of Tokyo  
 4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
 Email: yusuzuki@ims.u-tokyo.ac.jp  
 Suzuki.Y., Yoshitomo-Nakagawa.K., Maruyama.K., Suyama.A. and  
 Sugano.S. Construction and characterization of a full  
 length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),  
 149-156 (1997).

FEATURES  
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Best Local Similarity 61.9%; Pred. No. 15;  
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QY 42 GCTCGCGTGGAGGCCCGCCAGCCAGCCAGCGCGCGAGG 83  
 Db 46 GCAGCAACCGAGAGGGCACACAGCCCGCAGGTCCCGGTGG 5

RESULT 9  
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 LOCUS 21 bp DNA linear GSS 20-FEB-2001  
 DEFINITION 2M0112M01F Mouse 10kb plasmid UUGC1M library Mus musculus genomic  
 clone UUGC2M0112M01 F, genomic survey sequence.

ACCESSION AZ831993  
 VERSION AZ831993.1 GI:13001901  
 KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)

ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 1 (bases 1 to 21)

REFERENCE 1 (bases 1 to 21)  
 Authors Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,  
 Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,  
 Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von  
 Niederhausern,A. and Wright,D., Weiss,R.

Mouse whole genome scaffolding with paired end reads from 10kb  
 plasmid inserts  
 Unpublished (2000)  
 Contact: Robert B. Weiss  
 University of Utah Genome Center  
 University of Utah  
 Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
 84112, USA  
 Tel: 801 585 5606  
 Fax: 801 585 7177  
 Email: ddunn@genetics.utah.edu  
 Insert Length: 10000 Std Error: 0.00  
 Plate: 0112 row: M column: 01  
 Seq primer: CGTTGTAACACGACGCCAGT  
 Class: plasmid ends  
 High quality sequence stop: 21.

FEATURES  
 Location/Qualifiers  
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 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
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 /sex="Male"  
 /lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
 /clone\_lib="Mouse 10kb plasmid UUGC1M library"  
 /notes="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male); was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (G14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
 Best Local Similarity 89.5%; Pred. No. 4.8;

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Db	21	TGCTGCTGCTGCTGCTGC	3						
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LOCUS	HUMG503050	Human adult lung 3'		directed MboI cDNA Homo sapiens cdNA					
DEFINITION	clone lg0538 3'	mRNA sequence.							
ACCESSION	D45829								
VERSION	D45829.1	GI:662783							
KEYWORDS	EST.								
SOURCE	Homo sapiens (human)								
ORGANISM	Homo sapiens								
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
AUTHORS	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.								
TITLE	Itoh,K., Okubo,K., Yosii,J., Yokouchi,H. and Matsubara,K.								
JOURNAL	An expression profile of active genes in human lung								
MEDLINE	DNA Res. 1, 279-287 (1994)								
PUBMED	95236275								
COMMENT	7719923								
	Contact: Kohichi Itoh								
	Institute for Molecular and Cellular Biology								
	Osaka University								
	3-1, Yamadaoka, Suita, Osaka, 565, Japan								
	Tel: 06-877-5111 x3910								
	Fax: 06-877-1922								
	PROJECT = 'bodymapping'.								
FEATURES	Location/Qualifiers								
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	/clone="lg0538"								
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	/clone_lib="Human adult lung 3' directed MboI cDNA"								
	/note="Organ: lung; Adult human lung, 3' directed MboI"								
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Best Local Similarity	94.1%;	Pred.	No. 5;						
Matches	16;	Conservative	0;	Mismatches	1;	Indels	0;	Gaps	0;
Qy	3523	AAGCCAGAGTGATC	3539						
Db	17	AAGCCAGAGTGATC	1						
RESULT 11	AZ368917			20 bp	DNA	linear	GSS 02-OCT-2000		
LOCUS	1M0119A16F	Mouse 10kb plasmid UGUCIM library Mus musculus genomic clone UGUCIM0119A16 F,		genomic survey sequence.					
DEFINITION	cloning								
ACCESSION	AZ368917								
VERSION	AZ368917.1	GI:10482617							
KEYWORDS	GSS.								
SOURCE	Mus musculus (house mouse)								
ORGANISM	Mus musculus								
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
AUTHORS	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.								
	1 (bases 1 to 20)								
	Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,								
	Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,								
	Reilly,M., Rose,M., Stokes,R., Tingey,A., von								
	Niederhausern,A. and Wright,D., Weiss,R.								
TITLE	Mouse whole genome scaffolding with paired end reads from 10kb								
JOURNAL	plasmid inserts								
COMMENT	Unpublished (2000)								
	Contact: Robert B. Weiss								
	University of Utah Genome Center								

```

University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLCT, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0119 row: A column: 16
Seq primer: CGTGTAAACGACGCCAGT
Class: plasmid ends
High quality sequence stop: 20.
Location/Qualifiers
1..220
/organism="Mus musculus"
/mol_type="genomic DNA"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGCIM0119A16"
/sex="Male"
/lab_host="E. Coli strain XL10-Gold, Tl-resistant, F-"
/clone_lib="Mouse 10kb plasmid UUGCIM library"
/vector="PMD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptor DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of PMD42 [gi|4732114|gb|AF129072.1], a copy-number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adaptor mouse DNA was annealed to
adaptor vector DNA, and transformed into
chemically-competent E. coli XL10-Gold (Stratagene) cells
and selected for ampicillin resistance."

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred.No.5.5;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      3470 AAAGGAAGAAGAAAATCA 3489
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Db       20 AAAGGAAGAAAAAACGCA 1

RESULT 12
BM401275
LOCUS     19 bp mRNA linear EST 17-JAN-2002
DEFINITION
5009-0-85-B03.t.1 Chilcoat/Turkewitz cDNA (large fraction)
Tetrahymena thermophila cDNA, mRNA sequence.
ACCESSION BM401275
VERSION    GI:18201328
KEYWORDS   EST.
SOURCE     Tetrahymena thermophila
ORGANISM   Tetrahymena thermophila
            Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
            Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
REFERENCE 1 (bases 1 to 19)
AUTHORS   Turkewitz,A.P., Karrer,K.M., Jahn,C., Orlas,E., Kirk,K.E.,
            Frankel,J. and Klobutcher,L.
TITLE     EST from Tetrahymena thermophila, strain CU428.1, growing cells
JOURNAL   Unpublished (2002)
COMMENT   Contact: Turkewitz AP
            Molecular Genetics and Cell Biology
            University of Chicago
            920 E. 58th Street, Chicago, IL 60637, USA
            Tel: 773 702 4374
            Fax: 773 702 3172

```



**AUTHORS** Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.

**TITLE** Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

**JOURNAL MEDLINE PUBMED COMMENT** EMBO Rep. 2 (5), 388-393 (2001)  
21270072  
11375929

Contact: Yutaka Suzuki  
Department of Virology  
Institute of Medical Science, University of Tokyo  
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan  
Email: yusuzuki@ims.u-tokyo.ac.jp

Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

**FEATURES**

source	Location/Qualifiers 1..50 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606" /clone="HEP03705" /clone_lib="Sugano Homo sapiens cDNA library"
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Query Match 0.1%; Score 13.8; DB 1; Length 50;  
Best Local Similarity 63.6%; Pred. No. 15;  
Matches 21; Conservative 0; Mismatches 12; Indels 0; Gaps 0;

**QY** 42 GCCTCGCCTGAGAGCCGCCGCCAGCCAGGCAGG 74  
|| || || || || || || || || || || || || || || ||  
**Db** 47 GCACGAACCAGAAGGGCACTCAGACCCCGCAGG 15

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**RESULT 18**

**AJ587382**

**LOCUS** Arabidopsis thaliana T-DNA flanking sequence, left border, clone 270B03, genomic survey sequence.

**DEFINITION** AJ587382 13 bp DNA linear GSS 15-JAN-2004

**ACCESSION** AJ587382.1 GI:37937006

**VERSION** GSS; left border; T-DNA flanking sequence.

**KEYWORDS** Arabidopsis thaliana (thale cress)

**SOURCE** Arabidopsis thaliana

**ORGANISM** Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliopsida; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

**REFERENCE** 1 Brunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F., Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G., Lepiniec, L., Caboche, M. and Leclercq, A.  
T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites  
EMBO Rep. 3 (12), 1152-1157 (2002)

**TITLE** Of pre-insertion sites

**JOURNAL MEDLINE PUBMED** 22363535  
12446565

**REFERENCE** 2 (bases 1 to 13)  
Balzergue, S.

**AUTHORS** Direct Submission

**TITLE** Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE

**JOURNAL COMMENT** PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsgap.versaillies.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com>) and <http://genoplante-info.infobiogen.fr>.

**FEATURES**

Location/Qualifiers	
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/mol_type="genomic DNA"
/cultivar="Wassillewskija"
/db_xref="taxon:3702"
/clone="270B03"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
misc_feature
1. .13
/note="T-DNA flanking sequence
left border"

Query Match
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4308 GACTCTGTGGTTG 4320
Db 1 GACTCTGTGGTTG 13

RESULT 19
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LOCUS
DEFINITION
5009-0-6-G06.t.1 Chilcoat/Turkewitz cDNA (large fraction) EST 17-JAN-2002
Tetrahymena thermophila cDNA, mRNA sequence.
ACCESSION
BM399662
VERSION
BM399662.1 GI:18199715
KEYWORDS
EST.
SOURCE
Tetrahymena thermophila
ORGANISM
Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
REFERENCE
1 (bases 1 to 15)
AUTHORS
Turkewitz,A.P., Karrer,K.M., Jahn,C., Orias,E., Kirk,K.E.,
Frankel,J. and Klobutcher,L.
TITLE
EST from Tetrahymena thermophila, strain CU428.1, growing cells
JOURNAL
Unpublished (2002)
COMMENT
Contact: Turkewitz AP
Molecular Genetics and Cell Biology
University of Chicago
920 E. 58th Street, Chicago, IL 60637, USA
Tel: 773 702 4374
Fax: 773 702 3172
Email: apturkew@midway.uchicago.edu
Seq primer: T3.

FEATURES
source
1. .15
/organism="Tetrahymena thermophila"
/mol_type="mRNA"
/strain="CU428.1"
/db_xref="taxon:5911"
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/note="Vector: Bluescript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1461 CTGAGCCACGCGG 1473
Db 3 CTGAGCCACGCGG 15

RESULT 20
BM395730
LOCUS
DEFINITION
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Tetrahymena thermophila cDNA, mRNA sequence.
ACCESSION
BM395730
VERSION
BM395730.1 GI:18195783
KEYWORDS
EST.

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/note="Vector: Bluescript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."
Query Match
Best Local Similarity 0.1%; Score 13; DB 1; Length 17;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1462 TGAGCCACGCGGT 1474
Db 2 TGAGCCACGCGGT 14

RESULT 21
BM400706
LOCUS
DEFINITION
5009-0-77-G11.t.1 Chilcoat/turkewitz cDNA (large fraction) EST 17-JAN-2002
Tetrahymena thermophila cDNA, mRNA sequence.
ACCESSION
BM400706
VERSION
BM400706.1 GI:18200759
KEYWORDS
EST.
SOURCE
Tetrahymena thermophila
ORGANISM
Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
REFERENCE
1 (bases 1 to 17)
AUTHORS
Turkewitz,A.P., Karrer,K.M., Jahn,C., Orias,E., Kirk,K.E.,
Frankel,J. and Klobutcher,L.
TITLE
EST from Tetrahymena thermophila, strain CU428.1, growing cells
JOURNAL
Unpublished (2002)
COMMENT
Contact: Turkewitz AP
Molecular Genetics and Cell Biology
University of Chicago
920 E. 58th Street, Chicago, IL 60637, USA
Tel: 773 702 4374
Fax: 773 702 3172
Email: apturkew@midway.uchicago.edu
Seq primer: T3.

FEATURES
source
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/organism="Tetrahymena thermophila"
/mol_type="mRNA"
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/note="Vector: Bluescript2 SK+; Details on library
preparation can be found in Chilcoat and Turkewitz (2001)
Proc. Natl. Acad. Sci USA, 98: 8709-8713."

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Query Match      0.1%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. NO. 9.5;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1461 CTGAGCCACGCGG 1473
    |||||
Db 2 CTGAGCCACGCGG 14

RESULT 22
AJ594642
LOCUS
DEFINITION Arabidopsis thaliana T-DNA flanking sequence, left border, clone
403B03, genomic survey sequence.
ACCESSION AJ594642.1 GI:37944266
VERSION GSS; left border; T-DNA flanking sequence.
KEYWORDS Arabidopsis thaliana (thale cress)
SOURCE Arabidopsis thaliana
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.

REFERENCE 1
AUTHORS Brunaud V., Balzerque S., Dubreucq B., Aubourg S., Samson F.,
Chauvin S., Bechtold N., Cruaud C., DeRose R., Pelletier G.,
Lepiniec L., Caboche M., Leclercq A.
TITLE T-DNA integration into the Arabidopsis genome depends on sequences
of pre-insertion sites
JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)
MEDLINE 22363535
PUBMED 12448565

REFERENCE 2 (bases 1 to 17)
AUTHORS Balzerque S.
TITLE Direct Submission
JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue
Gaston Cremieux, 91057 Evry cedex, FRANCE
COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).

FEATURES
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            /cultivar="Wassillewskija"
            /db_xref="taxon:3702"
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            /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
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            /note="T-DNA flanking sequence
            left border"

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QY 4855 GGAAGTATAGAACTT 4870
    |||||
Db 2 GGAAGTATAGAACTT 17

RESULT 23
BM401358
LOCUS
DEFINITION 5009-0-9-D08.t.1 Chilcoat/Turkewitz cDNA (large fraction)
Tetrahymena thermophila cDNA, mRNA sequence.

QY 1461 CTGAGCCACGCGGT 1474
    |||||
Db 2 CTGAGTCACGCGGT 15

Query Match      0.1%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. NO. 11;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1461 CTGAGCCACGCGGT 1474
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Db 2 CTGAGTCACGCGGT 15

Search completed: October 5, 2005, 10:23:16
Job time : 5 secs

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ACCESSION BM401358
VERSION BM401358.1 GI:18201411
KEYWORDS EST.
SOURCE Tetrahymena thermophila
ORGANISM Tetrahymena thermophila
Eukaryota; Alveolata; Ciliophora; Oligohymenophorea;
Hymenostomatida; Tetrahymenina; Tetrahymenidae; Tetrahymena.
1 (bases 1 to 16)
AUTHORS Turkewitz, A.P., Karrer, K.M., Jahn, C., Orlas, E., Kirk, K.E.,
Frankel, J. and Klobutcher, L.
TITLE EST from Tetrahymena thermophila, strain CU428.1, growing cells
JOURNAL Unpublished (2002)
COMMENT Contact: Turkewitz AP
Molecular Genetics and Cell Biology
University of Chicago
920 E. 58th Street, Chicago, IL 60637, USA
Tel: 773 702 4374
Fax: 773 702 3172
Email: apturkew@midway.uchicago.edu
Seq primer: T3.

FEATURES
    source
        1..16
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            /mol_type="mRNA"
            /strain="CU428.1"
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            /clone_lib="Chilcoat/Turkewitz cDNA (large fraction)"
            /notes="Vector: Bluescript 2 SK+; Details on library
            preparation can be found in Chilcoat and Turkewitz (2001)
            Proc. Natl. Acad. Sci USA, 98: 8709-8713."

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 5, 2005, 11:05:53 ; Search time 499 Seconds

(without alignments)

3.217 Million cell updates/sec

Title: US-09-920-033-3\_1-5000

Perfect score: 14121

Sequence: 1 attccaccgggacctgcgg.....agctttattgtgtatcata 14121

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 0.5

Searched: 2943 segs, 56842 residues

Total number of hits satisfying chosen parameters: 5886

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2956 summaries

Database : ngsdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	36	0.3	36	1	AAT58427
2	36	0.3	36	1	AAV82538
3	33	0.2	33	1	AAT58426
4	33	0.2	33	1	AAV82537
5	30	0.2	30	1	AAT58425
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7	28	0.2	30	1	AAD54093
8	28	0.2	28	1	ACC62117
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10	28	0.2	28	1	ADO32558
11	24	0.2	24	1	AAV82557
12	23	0.2	31	1	AAI31038
13	23	0.2	23	1	ACC62116
14	23	0.2	23	1	ADH18016
15	23	0.2	23	1	ADO32557
16	22	0.2	22	1	AAV82534
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19	21	0.2	27	1	ADO43735
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31	21	0.1	21	1	AAV82544
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33	21	0.1	21	1	AAV82546

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35	20	0.1	20	1	AAD48324	Apo B591 DNA ampli
36	20	0.1	20	1	AAD48321	Apo B71 DNA ampli
37	20	0.1	20	1	AAD48322	Apo B71 DNA ampli
38	20	0.1	20	1	ACC62129	Human alipoprotein
39	20	0.1	20	1	ACC62133	Human alipoprotein
40	20	0.1	20	1	ACC62137	Human alipoprotein
41	20	0.1	20	1	ACC62149	Human alipoprotein
42	20	0.1	20	1	ACC62151	Human alipoprotein
43	20	0.1	20	1	ACC62153	Human alipoprotein
44	20	0.1	20	1	ACC62154	Human alipoprotein
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65	20	0.1	20	1	ACC62142	Human alipoprotein
66	20	0.1	20	1	ACC62140	Human alipoprotein
67	20	0.1	20	1	ADH18055	2'-MOE gapmer anti
68	20	0.1	20	1	ADH18137	2'-MOE gapmer anti
69	20	0.1	20	1	ADH18203	2'-MOE gapmer anti
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72	20	0.1	20	1	ADH18263	2'-MOE gapmer anti
73	20	0.1	20	1	ADH18305	2'-MOE gapmer anti
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76	20	0.1	20	1	ADH18578	Human alipoprote
77	20	0.1	20	1	ADH18591	Human alipoprote
78	20	0.1	20	1	ADH18628	Human alipoprote
79	20	0.1	20	1	ADH18630	Human alipoprote
80	20	0.1	20	1	ADH18631	Human alipoprote
81	20	0.1	20	1	ADH18666	Human alipoprote
82	20	0.1	20	1	ADH18679	Human alipoprote
83	20	0.1	20	1	ADH18681	Human alipoprote
84	20	0.1	20	1	ADH18707	Human alipoprote
85	20	0.1	20	1	ADH18033	2'-MOE gapmer anti
86	20	0.1	20	1	ADH18034	2'-MOE gapmer anti
87	20	0.1	20	1	ADH18051	2'-MOE gapmer anti
88	20	0.1	20	1	ADH18053	2'-MOE gapmer anti
89	20	0.1	20	1	ADH18158	2'-MOE gapmer anti
90	20	0.1	20	1	ADH18213	2'-MOE gapmer anti
91	20	0.1	20	1	ADH18223	2'-MOE gapmer anti
92	20	0.1	20	1	ADH18226	2'-MOE gapmer anti
93	20	0.1	20	1	ADH18311	2'-MOE gapmer anti
94	20	0.1	20	1	ADH18315	Human alipoprote
95	20	0.1	20	1	ADH18532	Human alipoprote
96	20	0.1	20	1	ADH18581	Human alipoprote
97	20	0.1	20	1	ADH18635	Human alipoprote
98	20	0.1	20	1	ADH18672	Human alipoprote
99	20	0.1	20	1	ADH18675	Human alipoprote
100	20	0.1	20	1	ADH18674	Human alipoprote
101	20	0.1	20	1	ADH18677	Human alipoprote
102	20	0.1	20	1	ADH18229	2'-MOE gapmer anti
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104	20	0.1	20	1	ADH18565	Human alipoprote
105	20	0.1	20	1	ADH18576	Human alipoprote
106	20	0.1	20	1	ADH18585	Human alipoprote

107 ADH18588 Human apolipoprote  
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c 109 ADH18148 2'-MOE gapmer anti  
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c 121 ADH18032 2'-MOE gapmer anti  
c 122 ADH18036 2'-MOE gapmer anti  
c 123 ADH18044 2'-MOE gapmer anti  
c 124 ADH18159 2'-MOE gapmer anti  
c 125 ADH18207 2'-MOE gapmer anti  
c 126 ADH18220 2'-MOE gapmer anti  
c 127 ADH18259 2'-MOE gapmer anti  
c 128 ADH18307 2'-MOE gapmer anti  
c 129 ADH18539 Human apolipoprote  
c 130 ADH18569 Human apolipoprote  
c 131 ADH18593 Human apolipoprote  
c 132 ADH18595 Human apolipoprote  
c 133 ADH18665 Human apolipoprote  
c 134 ADH18671 Human apolipoprote  
c 135 ADH18227 2'-MOE gapmer anti  
c 136 ADH18265 2'-MOE gapmer anti  
c 137 ADH18300 2'-MOE gapmer anti  
c 138 ADH18308 2'-MOE gapmer anti  
c 139 ADH18312 2'-MOE gapmer anti  
c 140 ADH18525 2'-MOE gapmer anti  
c 141 ADH18534 Human apolipoprote  
c 142 ADH18568 Human apolipoprote  
c 143 ADH18571 Human apolipoprote  
c 144 ADH18579 Human apolipoprote  
c 145 ADH18589 Human apolipoprote  
c 146 ADH18592 Human apolipoprote  
c 147 ADH18632 Human apolipoprote  
c 148 ADH18633 Human apolipoprote  
c 149 ADH18035 2'-MOE gapmer anti  
c 150 ADH18037 2'-MOE gapmer anti  
c 151 ADH18050 2'-MOE gapmer anti  
c 152 ADH18136 2'-MOE gapmer anti  
c 153 ADH18205 2'-MOE gapmer anti  
c 154 ADH18214 2'-MOE gapmer anti  
c 155 ADH18030 2'-MOE gapmer anti  
c 156 ADH18041 2'-MOE gapmer anti  
c 157 ADH18043 2'-MOE gapmer anti  
c 158 ADH18048 2'-MOE gapmer anti  
c 159 ADH18056 2'-MOE gapmer anti  
c 160 ADH18140 2'-MOE gapmer anti  
c 161 ADH18212 2'-MOE gapmer anti  
c 162 ADH18230 2'-MOE gapmer anti  
c 163 ADH18537 Human apolipoprote  
c 164 ADH18564 Human apolipoprote  
c 165 ADH18566 Human apolipoprote  
c 166 ADH18574 Human apolipoprote  
c 167 ADH18577 Human apolipoprote  
c 168 ADH18625 Human apolipoprote  
c 169 ADH18042 2'-MOE gapmer anti  
c 170 ADH18046 2'-MOE gapmer anti  
c 171 ADH18141 2'-MOE gapmer anti  
c 172 ADH18152 2'-MOE gapmer anti  
c 173 ADH18154 2'-MOE gapmer anti  
c 174 ADH18261 2'-MOE gapmer anti  
c 175 ADH18264 2'-MOE gapmer anti  
c 176 ADH18266 2'-MOE gapmer anti  
c 177 ADH18268 2'-MOE gapmer anti  
c 178 ADH18301 2'-MOE gapmer anti  
c 179 ADH18304 2'-MOE gapmer anti

c 180 20 0.1 20 1 ADH18313 Human apolipoprote  
181 20 0.1 20 1 ADH18582 Human apolipoprote  
182 20 0.1 20 1 ADH18590 Human apolipoprote  
183 20 0.1 20 1 ADH18598 Human apolipoprote  
184 20 0.1 20 1 ADH18662 Human apolipoprote  
185 20 0.1 20 1 ADH18663 Human apolipoprote  
186 20 0.1 20 1 ADH18669 Human apolipoprote  
187 20 0.1 20 1 ADH18678 Human apolipoprote  
c 188 20 0.1 20 1 ADH18029 2'-MOE gapmer anti  
c 189 20 0.1 20 1 ADH18047 2'-MOE gapmer anti  
c 190 20 0.1 20 1 ADH18157 2'-MOE gapmer anti  
c 191 20 0.1 20 1 ADH18215 2'-MOE gapmer anti  
c 192 20 0.1 20 1 ADH18310 2'-MOE gapmer anti  
c 193 20 0.1 20 1 ADH18542 Human apolipoprote  
194 20 0.1 20 1 ADH18575 Human apolipoprote  
195 20 0.1 20 1 ADH18580 Human apolipoprote  
196 20 0.1 20 1 ADH18587 Human apolipoprote  
197 20 0.1 20 1 ADH18597 Human apolipoprote  
198 20 0.1 20 1 ADH18626 Human apolipoprote  
c 199 20 0.1 20 1 ADH18262 2'-MOE gapmer anti  
c 200 20 0.1 20 1 ADH18296 2'-MOE gapmer anti  
c 201 20 0.1 20 1 ADH18040 2'-MOE gapmer anti  
c 202 20 0.1 20 1 ADH18153 2'-MOE gapmer anti  
c 203 20 0.1 20 1 ADH18156 2'-MOE gapmer anti  
c 204 20 0.1 20 1 ADH18219 2'-MOE gapmer anti  
c 205 20 0.1 20 1 ADH18260 2'-MOE gapmer anti  
c 206 20 0.1 20 1 ADH18527 Human apolipoprote  
c 207 20 0.1 20 1 ADH18531 Human apolipoprote  
c 208 20 0.1 20 1 ADH18594 Human apolipoprote  
c 209 20 0.1 20 1 ADH18629 Human apolipoprote  
c 210 20 0.1 20 1 ADH18670 Human apolipoprote  
c 211 20 0.1 20 1 ADH18680 Human apolipoprote  
c 212 20 0.1 20 1 ADH18196 2'-MOE gapmer anti  
c 213 20 0.1 20 1 ADH18198 2'-MOE gapmer anti  
c 214 20 0.1 20 1 ADH18199 2'-MOE gapmer anti  
c 215 20 0.1 20 1 ADH18201 2'-MOE gapmer anti  
c 216 20 0.1 20 1 ADH18210 2'-MOE gapmer anti  
c 217 20 0.1 20 1 ADH18298 2'-MOE gapmer anti  
c 218 20 0.1 20 1 ADH18306 2'-MOE gapmer anti  
c 219 20 0.1 20 1 ADH18314 2'-MOE gapmer anti  
c 220 20 0.1 20 1 ADH18533 Human apolipoprote  
c 221 20 0.1 20 1 ADH18570 Human apolipoprote  
c 222 20 0.1 20 1 ADH18572 Human apolipoprote  
c 223 20 0.1 20 1 ADH18583 Human apolipoprote  
c 224 20 0.1 20 1 ADH18596 Human apolipoprote  
c 225 20 0.1 20 1 ADH18634 Human apolipoprote  
c 226 20 0.1 20 1 ADH18146 2'-MOE gapmer anti  
c 227 20 0.1 20 1 ADH18049 2'-MOE gapmer anti  
c 228 20 0.1 20 1 ADH18135 2'-MOE gapmer anti  
c 229 20 0.1 20 1 ADH18138 2'-MOE gapmer anti  
c 230 20 0.1 20 1 ADH18147 2'-MOE gapmer anti  
c 231 20 0.1 20 1 ADH18204 2'-MOE gapmer anti  
c 232 20 0.1 20 1 ADH18216 2'-MOE gapmer anti  
c 233 20 0.1 20 1 ADH18267 2'-MOE gapmer anti  
c 234 20 0.1 20 1 ADH18627 Human apolipoprote  
c 235 20 0.1 20 1 ADH18667 Human apolipoprote  
c 236 20 0.1 20 1 ADH18668 Human apolipoprote  
c 237 20 0.1 20 1 ADH18143 2'-MOE gapmer anti  
c 238 20 0.1 20 1 ADH18145 2'-MOE gapmer anti  
c 239 20 0.1 20 1 ADH18155 2'-MOE gapmer anti  
c 240 20 0.1 20 1 ADH18540 Human apolipoprote  
c 241 20 0.1 20 1 ADH18028 2'-MOE gapmer anti  
c 242 20 0.1 20 1 ADH18038 2'-MOE gapmer anti  
c 243 20 0.1 20 1 ADH18052 2'-MOE gapmer anti  
c 244 20 0.1 20 1 ADH18150 2'-MOE gapmer anti  
c 245 20 0.1 20 1 ADH18162 2'-MOE gapmer anti  
c 246 20 0.1 20 1 ADH18197 2'-MOE gapmer anti  
c 247 20 0.1 20 1 ADH18217 2'-MOE gapmer anti  
c 248 20 0.1 20 1 ADH18228 2'-MOE gapmer anti  
c 249 20 0.1 20 1 ADH18302 2'-MOE gapmer anti  
c 250 20 0.1 20 1 ADH18530 Human apolipoprote  
c 251 20 0.1 20 1 ADH18573 Human apolipoprote  
c 252 20 0.1 20 1 ADH18676 Human apolipoprote

C 253	20	0.1	20	1	ADH18054	2'-MOE gapmer anti	C 326	20	0.1	20	1	AD032843	Antisense 2'-MOE g
C 254	20	0.1	20	1	ADH18144	2'-MOE gapmer anti	C 327	20	0.1	20	1	AD033118	Human apolipoprote
C 255	20	0.1	20	1	ADH18160	2'-MOE gapmer anti	C 328	20	0.1	20	1	AD033173	Human apolipoprote
C 256	20	0.1	20	1	ADH18202	2'-MOE gapmer anti	C 329	20	0.1	20	1	AD033176	Phosphodiester dou
C 257	20	0.1	20	1	ADH18299	2'-MOE gapmer anti	C 330	20	0.1	20	1	AD033459	Human apolipoprote
C 258	20	0.1	20	1	ADH18528	Human apolipoprote	C 331	20	0.1	20	1	AD032570	Antisense 2'-MOE g
C 259	20	0.1	20	1	ADH18673	Human apolipoprote	C 332	20	0.1	20	1	AD032596	Antisense 2'-MOE g
C 260	20	0.1	20	1	ADH18664	Human apolipoprote	C 333	20	0.1	20	1	AD032678	Antisense 2'-MOE g
C 261	20	0.1	20	1	ADH18258	2'-MOE gapmer anti	C 334	20	0.1	20	1	AD032685	Antisense 2'-MOE g
C 262	20	0.1	20	1	ADH18297	2'-MOE gapmer anti	C 335	20	0.1	20	1	AD032691	Antisense 2'-MOE g
C 263	20	0.1	20	1	ADH18529	Human apolipoprote	C 336	20	0.1	20	1	AD032741	Antisense 2'-MOE g
C 264	20	0.1	20	1	ADH18538	Human apolipoprote	C 337	20	0.1	20	1	AD032742	Antisense 2'-MOE g
C 265	20	0.1	20	1	ADH18541	Human apolipoprote	C 338	20	0.1	20	1	AD032746	Antisense 2'-MOE g
C 266	20	0.1	20	1	ADH18039	2'-MOE gapmer anti	C 339	20	0.1	20	1	AD032762	Antisense 2'-MOE g
C 267	20	0.1	20	1	ADH18045	2'-MOE gapmer anti	C 340	20	0.1	20	1	AD032799	Antisense 2'-MOE g
C 268	20	0.1	20	1	ADH18139	2'-MOE gapmer anti	C 341	20	0.1	20	1	AD032801	Antisense 2'-MOE g
C 269	20	0.1	20	1	ADH18149	2'-MOE gapmer anti	C 342	20	0.1	20	1	AD032802	Antisense 2'-MOE g
C 270	20	0.1	20	1	ADH18151	2'-MOE gapmer anti	C 343	20	0.1	20	1	AD032842	Antisense 2'-MOE g
C 271	20	0.1	20	1	ADH18206	2'-MOE gapmer anti	C 344	20	0.1	20	1	AD032847	Antisense 2'-MOE g
C 272	20	0.1	20	1	ADH18211	2'-MOE gapmer anti	C 345	20	0.1	20	1	AD032852	Antisense 2'-MOE g
C 273	20	0.1	20	1	ADH18224	2'-MOE gapmer anti	C 346	20	0.1	20	1	AD033209	Human apolipoprote
C 274	20	0.1	20	1	AD032583	Antisense 2'-MOE g	C 347	20	0.1	20	1	AD033217	Human apolipoprote
C 275	20	0.1	20	1	AD032590	Antisense 2'-MOE g	C 348	20	0.1	20	1	AD032580	Antisense 2'-MOE g
C 276	20	0.1	20	1	AD032591	Antisense 2'-MOE g	C 349	20	0.1	20	1	AD032592	Antisense 2'-MOE g
C 277	20	0.1	20	1	AD032740	Antisense 2'-MOE g	C 350	20	0.1	20	1	AD032755	Antisense 2'-MOE g
C 278	20	0.1	20	1	AD032764	Antisense 2'-MOE g	C 351	20	0.1	20	1	AD032766	Antisense 2'-MOE g
C 279	20	0.1	20	1	AD032767	Antisense 2'-MOE g	C 352	20	0.1	20	1	AD032768	Antisense 2'-MOE g
C 280	20	0.1	20	1	AD032841	Antisense 2'-MOE g	C 353	20	0.1	20	1	AD032803	Antisense 2'-MOE g
C 281	20	0.1	20	1	AD032846	Antisense 2'-MOE g	C 354	20	0.1	20	1	AD033082	Human apolipoprote
C 282	20	0.1	20	1	AD033110	Human apolipoprote	C 355	20	0.1	20	1	AD033124	Human apolipoprote
C 283	20	0.1	20	1	AD033112	Human apolipoprote	C 356	20	0.1	20	1	AD033128	Human apolipoprote
C 284	20	0.1	20	1	AD033119	Human apolipoprote	C 357	20	0.1	20	1	AD033138	Human apolipoprote
C 285	20	0.1	20	1	AD033134	Human apolipoprote	C 358	20	0.1	20	1	AD033168	Human apolipoprote
C 286	20	0.1	20	1	AD033166	Human apolipoprote	C 359	20	0.1	20	1	AD033448	Human apolipoprote
C 287	20	0.1	20	1	AD032586	Antisense 2'-MOE g	C 360	20	0.1	20	1	AD032574	Antisense 2'-MOE g
C 288	20	0.1	20	1	AD032588	Antisense 2'-MOE g	C 361	20	0.1	20	1	AD032688	Antisense 2'-MOE g
C 289	20	0.1	20	1	AD032589	Antisense 2'-MOE g	C 362	20	0.1	20	1	AD032737	Antisense 2'-MOE g
C 290	20	0.1	20	1	AD032597	Antisense 2'-MOE g	C 363	20	0.1	20	1	AD032744	Antisense 2'-MOE g
C 291	20	0.1	20	1	AD032690	Antisense 2'-MOE g	C 364	20	0.1	20	1	AD032844	Antisense 2'-MOE g
C 292	20	0.1	20	1	AD032702	Antisense 2'-MOE g	C 365	20	0.1	20	1	AD032845	Antisense 2'-MOE g
C 293	20	0.1	20	1	AD032751	Antisense 2'-MOE g	C 366	20	0.1	20	1	AD032849	Antisense 2'-MOE g
C 294	20	0.1	20	1	AD032840	Antisense 2'-MOE g	C 367	20	0.1	20	1	AD032854	Antisense 2'-MOE g
C 295	20	0.1	20	1	AD033106	Human apolipoprote	C 368	20	0.1	20	1	AD033074	Human apolipoprote
C 296	20	0.1	20	1	AD033127	Human apolipoprote	C 369	20	0.1	20	1	AD033080	Human apolipoprote
C 297	20	0.1	20	1	AD033130	Human apolipoprote	C 370	20	0.1	20	1	AD033105	Human apolipoprote
C 298	20	0.1	20	1	AD033167	Human apolipoprote	C 371	20	0.1	20	1	AD033123	Human apolipoprote
C 299	20	0.1	20	1	AD033171	Human apolipoprote	C 372	20	0.1	20	1	AD032573	Antisense 2'-MOE g
C 300	20	0.1	20	1	AD033458	Phosphodiester dou	C 373	20	0.1	20	1	AD032695	Antisense 2'-MOE g
C 301	20	0.1	20	1	AD032571	Antisense 2'-MOE g	C 374	20	0.1	20	1	AD032739	Antisense 2'-MOE g
C 302	20	0.1	20	1	AD032577	Antisense 2'-MOE g	C 375	20	0.1	20	1	AD032748	Antisense 2'-MOE g
C 303	20	0.1	20	1	AD032581	Antisense 2'-MOE g	C 376	20	0.1	20	1	AD032750	Antisense 2'-MOE g
C 304	20	0.1	20	1	AD032587	Antisense 2'-MOE g	C 377	20	0.1	20	1	AD032759	Antisense 2'-MOE g
C 305	20	0.1	20	1	AD032676	Antisense 2'-MOE g	C 378	20	0.1	20	1	AD032800	Human apolipoprote
C 306	20	0.1	20	1	AD032743	Antisense 2'-MOE g	C 379	20	0.1	20	1	AD033107	Human apolipoprote
C 307	20	0.1	20	1	AD032749	Antisense 2'-MOE g	C 380	20	0.1	20	1	AD033116	Human apolipoprote
C 308	20	0.1	20	1	AD032758	Antisense 2'-MOE g	C 381	20	0.1	20	1	AD033139	Human apolipoprote
C 309	20	0.1	20	1	AD032760	Antisense 2'-MOE g	C 382	20	0.1	20	1	AD033432	Phosphodiester dou
C 310	20	0.1	20	1	AD032763	Antisense 2'-MOE g	C 383	20	0.1	20	1	AD032682	Antisense 2'-MOE g
C 311	20	0.1	20	1	AD032805	Antisense 2'-MOE g	C 384	20	0.1	20	1	AD032683	Antisense 2'-MOE g
C 312	20	0.1	20	1	AD033068	Human apolipoprote	C 385	20	0.1	20	1	AD032698	Antisense 2'-MOE g
C 313	20	0.1	20	1	AD033133	Human apolipoprote	C 386	20	0.1	20	1	AD032747	Antisense 2'-MOE g
C 314	20	0.1	20	1	AD033169	Human apolipoprote	C 387	20	0.1	20	1	AD032838	Antisense 2'-MOE g
C 315	20	0.1	20	1	AD033203	Human apolipoprote	C 388	20	0.1	20	1	AD032855	Antisense 2'-MOE g
C 316	20	0.1	20	1	AD033208	Human apolipoprote	C 389	20	0.1	20	1	AD033066	Antisense 2'-MOE g
C 317	20	0.1	20	1	AD033431	Phosphodiester dou	C 390	20	0.1	20	1	AD033070	Human apolipoprote
C 318	20	0.1	20	1	AD033452	Phosphodiester dou	C 391	20	0.1	20	1	AD033073	Human apolipoprote
C 319	20	0.1	20	1	AD032575	Antisense 2'-MOE g	C 392	20	0.1	20	1	AD033081	Human apolipoprote
C 320	20	0.1	20	1	AD032576	Antisense 2'-MOE g	C 393	20	0.1	20	1	AD033108	Human apolipoprote
C 321	20	0.1	20	1	AD032578	Antisense 2'-MOE g	C 394	20	0.1	20	1	AD033170	Human apolipoprote
C 322	20	0.1	20	1	AD032593	Antisense 2'-MOE g	C 395	20	0.1	20	1	AD033172	Human apolipoprote
C 323	20	0.1	20	1	AD032595	Antisense 2'-MOE g	C 396	20	0.1	20	1	AD033456	Phosphodiester dou
C 324	20	0.1	20	1	AD032752	Antisense 2'-MOE g	C 397	20	0.1	20	1	AD032684	Antisense 2'-MOE g
C 325	20	0.1	20	1	AD032761	Antisense 2'-MOE g	C 398	20	0.1	20	1	AD032693	Antisense 2'-MOE g

C 399	20	0.1	20	1	ADO32765	Antisense 2'-MOE g
C 400	20	0.1	20	1	ADO32837	Antisense 2'-MOE g
C 401	20	0.1	20	1	ADO32851	Antisense 2'-MOE g
C 402	20	0.1	20	1	ADO32856	Antisense 2'-MOE g
C 403	20	0.1	20	1	ADO33078	Human apolipoprote
C 404	20	0.1	20	1	ADO33083	Human apolipoprote
C 405	20	0.1	20	1	ADO33115	Human apolipoprote
C 406	20	0.1	20	1	ADO33125	Human apolipoprote
C 407	20	0.1	20	1	ADO33174	Human apolipoprote
C 408	20	0.1	20	1	ADO333457	Phosphodiester dou
C 409	20	0.1	20	1	ADO32569	Antisense 2'-MOE g
C 410	20	0.1	20	1	ADO32582	Antisense 2'-MOE g
C 411	20	0.1	20	1	ADO32681	Antisense 2'-MOE g
C 412	20	0.1	20	1	ADO32699	Antisense 2'-MOE g
C 413	20	0.1	20	1	ADO32701	Antisense 2'-MOE g
C 414	20	0.1	20	1	ADO32738	Antisense 2'-MOE g
C 415	20	0.1	20	1	ADO32770	Antisense 2'-MOE g
C 416	20	0.1	20	1	ADO32771	Antisense 2'-MOE g
C 417	20	0.1	20	1	ADO33072	Human apolipoprote
C 418	20	0.1	20	1	ADO33075	Human apolipoprote
C 419	20	0.1	20	1	ADO33079	Human apolipoprote
C 420	20	0.1	20	1	ADO33122	Human apolipoprote
C 421	20	0.1	20	1	ADO33136	Human apolipoprote
C 422	20	0.1	20	1	ADO33214	Human apolipoprote
C 423	20	0.1	20	1	ADO33215	Human apolipoprote
C 424	20	0.1	20	1	ADO33221	Human apolipoprote
C 425	20	0.1	20	1	ADO33460	Human apolipoprote
C 426	20	0.1	20	1	ADO32594	Phosphodiester dou
C 427	20	0.1	20	1	ADO32594	Antisense 2'-MOE g
C 428	20	0.1	20	1	ADO32689	Antisense 2'-MOE g
C 429	20	0.1	20	1	ADO32808	Antisense 2'-MOE g
C 430	20	0.1	20	1	ADO33076	Human apolipoprote
C 431	20	0.1	20	1	ADO33120	Human apolipoprote
C 432	20	0.1	20	1	ADO33132	Human apolipoprote
C 433	20	0.1	20	1	ADO33455	Phosphodiester dou
C 434	20	0.1	20	1	ADO332584	Antisense 2'-MOE g
C 435	20	0.1	20	1	ADO32687	Antisense 2'-MOE g
C 436	20	0.1	20	1	ADO32697	Antisense 2'-MOE g
C 437	20	0.1	20	1	ADO32703	Antisense 2'-MOE g
C 438	20	0.1	20	1	ADO32804	Antisense 2'-MOE g
C 439	20	0.1	20	1	ADO32839	Antisense 2'-MOE g
C 440	20	0.1	20	1	ADO33071	Human apolipoprote
C 441	20	0.1	20	1	ADO33114	Human apolipoprote
C 442	20	0.1	20	1	ADO33175	Human apolipoprote
C 443	20	0.1	20	1	ADO33205	Human apolipoprote
C 444	20	0.1	20	1	ADO33210	Human apolipoprote
C 445	20	0.1	20	1	ADO33218	Human apolipoprote
C 446	20	0.1	20	1	ADO33320	Human apolipoprote
C 447	20	0.1	20	1	ADO33248	Human apolipoprote
C 448	20	0.1	20	1	ADO32579	Antisense 2'-MOE g
C 449	20	0.1	20	1	ADO32694	Antisense 2'-MOE g
C 450	20	0.1	20	1	ADO32745	Antisense 2'-MOE g
C 451	20	0.1	20	1	ADO32754	Antisense 2'-MOE g
C 452	20	0.1	20	1	ADO32756	Antisense 2'-MOE g
C 453	20	0.1	20	1	ADO32806	Antisense 2'-MOE g
C 454	20	0.1	20	1	ADO32807	Antisense 2'-MOE g
C 455	20	0.1	20	1	ADO32853	Human apolipoprote
C 456	20	0.1	20	1	ADO33113	Human apolipoprote
C 457	20	0.1	20	1	ADO33117	Human apolipoprote
C 458	20	0.1	20	1	ADO33121	Human apolipoprote
C 459	20	0.1	20	1	ADO33126	Human apolipoprote
C 460	20	0.1	20	1	ADO33129	Human apolipoprote
C 461	20	0.1	20	1	ADO33135	Human apolipoprote
C 462	20	0.1	20	1	ADO33137	Human apolipoprote
C 463	20	0.1	20	1	ADO33204	Human apolipoprote
C 464	20	0.1	20	1	ADO33207	Human apolipoprote
C 465	20	0.1	20	1	ADO33216	Human apolipoprote
C 466	20	0.1	20	1	ADO33222	Human apolipoprote
C 467	20	0.1	20	1	ADO32572	Antisense 2'-MOE g
C 468	20	0.1	20	1	ADO32585	Antisense 2'-MOE g
C 469	20	0.1	20	1	ADO32677	Antisense 2'-MOE g
C 470	20	0.1	20	1	ADO32679	Antisense 2'-MOE g
C 471	20	0.1	20	1	ADO32680	Antisense 2'-MOE g
C 472	20	0.1	20	1	ADO32753	Antisense 2'-MOE g
C 473	20	0.1	20	1	ADO32757	Antisense 2'-MOE g
C 474	20	0.1	20	1	ADO32769	Antisense 2'-MOE g
C 475	20	0.1	20	1	ADO32848	Human apolipoprote
C 476	20	0.1	20	1	ADO33077	Human apolipoprote
C 477	20	0.1	20	1	ADO33111	Human apolipoprote
C 478	20	0.1	20	1	ADO33206	Human apolipoprote
C 479	20	0.1	20	1	ADO32692	Antisense 2'-MOE g
C 480	20	0.1	20	1	ADO32696	Antisense 2'-MOE g
C 481	20	0.1	20	1	ADO32700	Antisense 2'-MOE g
C 482	20	0.1	20	1	ADO32809	Antisense 2'-MOE g
C 483	20	0.1	20	1	ADO32850	Human apolipoprote
C 484	20	0.1	20	1	ADO33069	Human apolipoprote
C 485	20	0.1	20	1	ADO33109	Human apolipoprote
C 486	20	0.1	20	1	ADO33131	Human apolipoprote
C 487	20	0.1	20	1	ADO33211	Human apolipoprote
C 488	20	0.1	20	1	ADO33212	Human apolipoprote
C 489	20	0.1	20	1	ADO33213	Human apolipoprote
C 490	20	0.1	20	1	ADO33219	Human apolipoprote
C 491	20	0.1	20	1	AAQ72756	Solid phase restri
C 492	19.8	0.1	25	1	AAQ72756	PCR primer used to
C 493	19.4	0.1	26	1	AAH28142	Myotonic dystrophy
C 494	19.2	0.1	23	1	ABK85840	Soybean 318013 reg
C 495	19	0.1	25	1	AAI62090	Antisense 2'-MOE g
C 496	19	0.1	19	1	ADO33423	Human apolipoprote
C 497	19	0.1	19	1	ADR75553	Human apolipoprote
C 498	19	0.1	19	1	ADR75558	Human apolipoprote
C 499	19	0.1	19	1	ADR75560	Human apolipoprote
C 500	19	0.1	19	1	ADR75567	Human apolipoprote
C 501	19	0.1	19	1	ADR75648	Human apolipoprote
C 502	19	0.1	19	1	ADR75703	Human apolipoprote
C 503	19	0.1	19	1	ADR75726	Human apolipoprote
C 504	19	0.1	19	1	ADR75729	Human apolipoprote
C 505	19	0.1	19	1	ADR75852	Human apolipoprote
C 506	19	0.1	19	1	ADR75888	Human apolipoprote
C 507	19	0.1	19	1	ADR75892	Human apolipoprote
C 508	19	0.1	19	1	ADR75907	Human apolipoprote
C 509	19	0.1	19	1	ADR75909	Human apolipoprote
C 510	19	0.1	19	1	ADR75983	Human apolipoprote
C 511	19	0.1	19	1	ADR75998	Human apolipoprote
C 512	19	0.1	19	1	ADR76006	Human apolipoprote
C 513	19	0.1	19	1	ADR76020	Human apolipoprote
C 514	19	0.1	19	1	ADR76024	Human apolipoprote
C 515	19	0.1	19	1	ADR76062	Human apolipoprote
C 516	19	0.1	19	1	ADR76065	Human apolipoprote
C 517	19	0.1	19	1	ADR76271	Human apolipoprote
C 518	19	0.1	19	1	ADR76272	Human apolipoprote
C 519	19	0.1	19	1	ADR76302	Human apolipoprote
C 520	19	0.1	19	1	ADR76304	Human apolipoprote
C 521	19	0.1	19	1	ADR76326	Human apolipoprote
C 522	19	0.1	19	1	ADR76330	Human apolipoprote
C 523	19	0.1	19	1	ADR76345	Human apolipoprote
C 524	19	0.1	19	1	ADR76348	Human apolipoprote
C 525	19	0.1	19	1	ADR76352	Human apolipoprote
C 526	19	0.1	19	1	ADR76366	Human apolipoprote
C 527	19	0.1	19	1	ADR76368	Human apolipoprote
C 528	19	0.1	19	1	ADR76395	Human apolipoprote
C 529	19	0.1	19	1	ADR76405	Human apolipoprote
C 530	19	0.1	19	1	ADR76415	Human apolipoprote
C 531	19	0.1	19	1	ADR76422	Human apolipoprote
C 532	19	0.1	19	1	ADR76423	Human apolipoprote
C 533	19	0.1	19	1	ADR76437	Human apolipoprote
C 534	19	0.1	19	1	ADR76446	Human apolipoprote
C 535	19	0.1	19	1	ADR76460	Human apolipoprote
C 536	19	0.1	19	1	ADR76495	Human apolipoprote
C 537	19	0.1	19	1	ADR76499	Human apolipoprote
C 538	19	0.1	19	1	ADR76779	Human apolipoprote
C 539	19	0.1	19	1	ADR76884	Human apolipoprote
C 540	19	0.1	19	1	ADR76904	Human apolipoprote
C 541	19	0.1	19	1	ADR77271	Human apolipoprote
C 542	19	0.1	19	1	ADR77323	Human apolipoprote
C 543	19	0.1	19	1	ADR77324	Human apolipoprote
C 544	19	0.1	19	1	ADR77401	Human apolipoprote









983	19	0.1	19	1	ADR77427	Human apolipoprote	1056	19	0.1	19	1	ADR76011	Human apolipoprote
984	19	0.1	19	1	ADR77452	Human apolipoprote	1057	19	0.1	19	1	ADR76021	Human apolipoprote
985	19	0.1	19	1	ADR77474	Human apolipoprote	1058	19	0.1	19	1	ADR76034	Human apolipoprote
986	19	0.1	19	1	ADR77566	Human apolipoprote	1059	19	0.1	19	1	ADR76042	Human apolipoprote
987	19	0.1	19	1	ADR77784	Human apolipoprote	1060	19	0.1	19	1	ADR76058	Human apolipoprote
988	19	0.1	19	1	ADR77948	Human apolipoprote	1061	19	0.1	19	1	ADR76059	Human apolipoprote
989	19	0.1	19	1	ADR78152	Human apolipoprote	1062	19	0.1	19	1	ADR76259	Human apolipoprote
990	19	0.1	19	1	ADR78173	Human apolipoprote	1063	19	0.1	19	1	ADR76277	Human apolipoprote
991	19	0.1	19	1	ADR78192	Human apolipoprote	1064	19	0.1	19	1	ADR76276	Human apolipoprote
992	19	0.1	19	1	ADR78193	Human apolipoprote	1065	19	0.1	19	1	ADR76280	Human apolipoprote
993	19	0.1	19	1	ADR78237	Human apolipoprote	1066	19	0.1	19	1	ADR76283	Human apolipoprote
994	19	0.1	19	1	ADR78257	Human apolipoprote	1067	19	0.1	19	1	ADR76316	Human apolipoprote
995	19	0.1	19	1	ADR78270	Human apolipoprote	1068	19	0.1	19	1	ADR76327	Human apolipoprote
996	19	0.1	19	1	ADR78290	Human apolipoprote	1069	19	0.1	19	1	ADR76350	Human apolipoprote
997	19	0.1	19	1	ADR78310	Human apolipoprote	1070	19	0.1	19	1	ADR76371	Human apolipoprote
998	19	0.1	19	1	ADR78329	Human apolipoprote	1071	19	0.1	19	1	ADR76376	Human apolipoprote
999	19	0.1	19	1	ADR78336	Human apolipoprote	1072	19	0.1	19	1	ADR76391	Human apolipoprote
1000	19	0.1	19	1	ADR78343	Human apolipoprote	1073	19	0.1	19	1	ADR76418	Human apolipoprote
1001	19	0.1	19	1	ADR78502	Human apolipoprote	1074	19	0.1	19	1	ADR76440	Human apolipoprote
1002	19	0.1	19	1	ADR78539	Human apolipoprote	1075	19	0.1	19	1	ADR76487	Human apolipoprote
1003	19	0.1	19	1	ADR78576	Human apolipoprote	1076	19	0.1	19	1	ADR76905	Human apolipoprote
1004	19	0.1	19	1	ADR78585	Human apolipoprote	1077	19	0.1	19	1	ADR76974	Human apolipoprote
1005	19	0.1	19	1	ADR78605	Human apolipoprote	1078	19	0.1	19	1	ADR77006	Human apolipoprote
1006	19	0.1	19	1	ADR78611	Human apolipoprote	1079	19	0.1	19	1	ADR77307	Human apolipoprote
1007	19	0.1	19	1	ADR78651	Human apolipoprote	1080	19	0.1	19	1	ADR77350	Human apolipoprote
1008	19	0.1	19	1	ADR78661	Human apolipoprote	1081	19	0.1	19	1	ADR77361	Human apolipoprote
1009	19	0.1	19	1	ADR78662	Human apolipoprote	1082	19	0.1	19	1	ADR77391	Human apolipoprote
1010	19	0.1	19	1	ADR78676	Human apolipoprote	1083	19	0.1	19	1	ADR77522	Human apolipoprote
1011	19	0.1	19	1	ADR78881	Human apolipoprote	1084	19	0.1	19	1	ADR77529	Human apolipoprote
1012	19	0.1	19	1	ADR78920	Human apolipoprote	1085	19	0.1	19	1	ADR77567	Human apolipoprote
1013	19	0.1	19	1	ADR78948	Human apolipoprote	1086	19	0.1	19	1	ADR78059	Human apolipoprote
1014	19	0.1	19	1	ADR78956	Human apolipoprote	1087	19	0.1	19	1	ADR78162	Human apolipoprote
1015	19	0.1	19	1	ADR78964	Human apolipoprote	1088	19	0.1	19	1	ADR78169	Human apolipoprote
1016	19	0.1	19	1	ADR78970	Human apolipoprote	1089	19	0.1	19	1	ADR78238	Human apolipoprote
1017	19	0.1	19	1	ADR78999	Human apolipoprote	1090	19	0.1	19	1	ADR78241	Human apolipoprote
1018	19	0.1	19	1	ADR79002	Human apolipoprote	1091	19	0.1	19	1	ADR78244	Human apolipoprote
1019	19	0.1	19	1	ADR79020	Human apolipoprote	1092	19	0.1	19	1	ADR78314	Human apolipoprote
1020	19	0.1	19	1	ADR79040	Human apolipoprote	1093	19	0.1	19	1	ADR78341	Human apolipoprote
1021	19	0.1	19	1	ADR79063	Human apolipoprote	1094	19	0.1	19	1	ADR78355	Human apolipoprote
1022	19	0.1	19	1	ADR79074	Human apolipoprote	1095	19	0.1	19	1	ADR78439	Human apolipoprote
1023	19	0.1	19	1	ADR79077	Human apolipoprote	1096	19	0.1	19	1	ADR78499	Human apolipoprote
1024	19	0.1	19	1	ADR79089	Human apolipoprote	1097	19	0.1	19	1	ADR78513	Human apolipoprote
1025	19	0.1	19	1	ADR79103	Human apolipoprote	1098	19	0.1	19	1	ADR78529	Human apolipoprote
1026	19	0.1	19	1	ADR79135	Human apolipoprote	1099	19	0.1	19	1	ADR78535	Human apolipoprote
1027	19	0.1	19	1	ADR79147	Human apolipoprote	1100	19	0.1	19	1	ADR78541	Human apolipoprote
1028	19	0.1	19	1	ADR79158	Human apolipoprote	1101	19	0.1	19	1	ADR78545	Human apolipoprote
1029	19	0.1	19	1	ADR79161	Human apolipoprote	1102	19	0.1	19	1	ADR78566	Human apolipoprote
1030	19	0.1	19	1	ADR79180	Human apolipoprote	1103	19	0.1	19	1	ADR78589	Human apolipoprote
1031	19	0.1	19	1	ADR79194	Human apolipoprote	1104	19	0.1	19	1	ADR78589	Human apolipoprote
1032	19	0.1	19	1	ADR79200	Human apolipoprote	1105	19	0.1	19	1	ADR78640	Human apolipoprote
1033	19	0.1	19	1	ADR79499	Human apolipoprote	1106	19	0.1	19	1	ADR78650	Human apolipoprote
1034	19	0.1	19	1	ADR79561	Human apolipoprote	1107	19	0.1	19	1	ADR78668	Human apolipoprote
1035	19	0.1	19	1	ADR79866	Human apolipoprote	1108	19	0.1	19	1	ADR78686	Human apolipoprote
1036	19	0.1	19	1	ADR80037	Human apolipoprote	1109	19	0.1	19	1	ADR78867	Human apolipoprote
1037	19	0.1	19	1	ADR80457	Human apolipoprote	1110	19	0.1	19	1	ADR78875	Human apolipoprote
1038	19	0.1	19	1	ADR80633	Human apolipoprote	1111	19	0.1	19	1	ADR78886	Human apolipoprote
1039	19	0.1	19	1	ADR75545	Human apolipoprote	1112	19	0.1	19	1	ADR78889	Human apolipoprote
1040	19	0.1	19	1	ADR75564	Human apolipoprote	1113	19	0.1	19	1	ADR78896	Human apolipoprote
1041	19	0.1	19	1	ADR75619	Human apolipoprote	1114	19	0.1	19	1	ADR78921	Human apolipoprote
1042	19	0.1	19	1	ADR75626	Human apolipoprote	1115	19	0.1	19	1	ADR78922	Human apolipoprote
1043	19	0.1	19	1	ADR75638	Human apolipoprote	1116	19	0.1	19	1	ADR78929	Human apolipoprote
1044	19	0.1	19	1	ADR75681	Human apolipoprote	1117	19	0.1	19	1	ADR78954	Human apolipoprote
1045	19	0.1	19	1	ADR75689	Human apolipoprote	1118	19	0.1	19	1	ADR78959	Human apolipoprote
1046	19	0.1	19	1	ADR75697	Human apolipoprote	1119	19	0.1	19	1	ADR78969	Human apolipoprote
1047	19	0.1	19	1	ADR75698	Human apolipoprote	1120	19	0.1	19	1	ADR78974	Human apolipoprote
1048	19	0.1	19	1	ADR75713	Human apolipoprote	1121	19	0.1	19	1	ADR78986	Human apolipoprote
1049	19	0.1	19	1	ADR75714	Human apolipoprote	1122	19	0.1	19	1	ADR79012	Human apolipoprote
1050	19	0.1	19	1	ADR75789	Human apolipoprote	1123	19	0.1	19	1	ADR79032	Human apolipoprote
1051	19	0.1	19	1	ADR75910	Human apolipoprote	1124	19	0.1	19	1	ADR79036	Human apolipoprote
1052	19	0.1	19	1	ADR75930	Human apolipoprote	1125	19	0.1	19	1	ADR79062	Human apolipoprote
1053	19	0.1	19	1	ADR75940	Human apolipoprote	1126	19	0.1	19	1	ADR79082	Human apolipoprote
1054	19	0.1	19	1	ADR75961	Human apolipoprote	1127	19	0.1	19	1	ADR79088	Human apolipoprote
1055	19	0.1	19	1	ADR76009	Human apolipoprote	1128	19	0.1	19	1	ADR79105	Human apolipoprote









1713	19	0.1	19	1	AD784668	Human apolipoprote	1786	19	0.1	19	1	AD786470	Human apolipoprote
1714	19	0.1	19	1	AD784745	Human apolipoprote	1787	19	0.1	19	1	AD786502	Human apolipoprote
1715	19	0.1	19	1	AD78515	Human apolipoprote	1788	19	0.1	19	1	AD786507	Human apolipoprote
1716	19	0.1	19	1	AD78516	Human apolipoprote	1789	19	0.1	19	1	AD786512	Human apolipoprote
1717	19	0.1	19	1	AD78518	Human apolipoprote	1790	19	0.1	19	1	AD786541	Human apolipoprote
1718	19	0.1	19	1	AD78553	Human apolipoprote	1791	19	0.1	19	1	AD786617	Human apolipoprote
1719	19	0.1	19	1	AD78602	Human apolipoprote	1792	19	0.1	19	1	AD786640	Human apolipoprote
1720	19	0.1	19	1	AD786618	Human apolipoprote	1793	19	0.1	19	1	AD786822	Human apolipoprote
1721	19	0.1	19	1	AD786629	Human apolipoprote	1794	19	0.1	19	1	AD786885	Human apolipoprote
1722	19	0.1	19	1	AD786635	Human apolipoprote	1795	19	0.1	19	1	AD787357	Human apolipoprote
1723	19	0.1	19	1	AD786639	Human apolipoprote	1796	19	0.1	19	1	AD787463	Human apolipoprote
1724	19	0.1	19	1	AD786677	Human apolipoprote	1797	19	0.1	19	1	AD787482	Human apolipoprote
1725	19	0.1	19	1	AD788874	Human apolipoprote	1798	19	0.1	19	1	AD787512	Human apolipoprote
1726	19	0.1	19	1	AD788940	Human apolipoprote	1799	19	0.1	19	1	AD787523	Human apolipoprote
1727	19	0.1	19	1	AD788950	Human apolipoprote	1800	19	0.1	19	1	AD787538	Human apolipoprote
1728	19	0.1	19	1	AD788958	Human apolipoprote	1801	19	0.1	19	1	AD787539	Human apolipoprote
1729	19	0.1	19	1	AD788977	Human apolipoprote	1802	19	0.1	19	1	AD787578	Human apolipoprote
1730	19	0.1	19	1	AD788982	Human apolipoprote	1803	19	0.1	19	1	AD7878140	Human apolipoprote
1731	19	0.1	19	1	AD79022	Human apolipoprote	1804	19	0.1	19	1	AD7878186	Human apolipoprote
1732	19	0.1	19	1	AD79041	Human apolipoprote	1805	19	0.1	19	1	AD7878195	Human apolipoprote
1733	19	0.1	19	1	AD79042	Human apolipoprote	1806	19	0.1	19	1	AD7878296	Human apolipoprote
1734	19	0.1	19	1	AD79046	Human apolipoprote	1807	19	0.1	19	1	AD7878304	Human apolipoprote
1735	19	0.1	19	1	AD79079	Human apolipoprote	1808	19	0.1	19	1	AD7878320	Human apolipoprote
1736	19	0.1	19	1	AD79083	Human apolipoprote	1809	19	0.1	19	1	AD7878354	Human apolipoprote
1737	19	0.1	19	1	AD79091	Human apolipoprote	1810	19	0.1	19	1	AD7878543	Human apolipoprote
1738	19	0.1	19	1	AD79114	Human apolipoprote	1811	19	0.1	19	1	AD7878559	Human apolipoprote
1739	19	0.1	19	1	AD79123	Human apolipoprote	1812	19	0.1	19	1	AD7878569	Human apolipoprote
1740	19	0.1	19	1	AD79125	Human apolipoprote	1813	19	0.1	19	1	AD7878571	Human apolipoprote
1741	19	0.1	19	1	AD79173	Human apolipoprote	1814	19	0.1	19	1	AD7878583	Human apolipoprote
1742	19	0.1	19	1	AD79178	Human apolipoprote	1815	19	0.1	19	1	AD7878595	Human apolipoprote
1743	19	0.1	19	1	AD79642	Human apolipoprote	1816	19	0.1	19	1	AD7878601	Human apolipoprote
1744	19	0.1	19	1	AD79682	Human apolipoprote	1817	19	0.1	19	1	AD7878664	Human apolipoprote
1745	19	0.1	19	1	AD798892	Human apolipoprote	1818	19	0.1	19	1	AD7878673	Human apolipoprote
1746	19	0.1	19	1	AD80249	Human apolipoprote	1819						









2297	18	0.1	19	1	ADR79151	Human apolipoprote	2370	17.4	0.1	19	1	ADR75563	Human apolipoprote
2298	18	0.1	19	1	ADR77547	Human apolipoprote	2371	17.4	0.1	19	1	ADR75576	Human apolipoprote
2299	18	0.1	19	1	ADR79182	Human apolipoprote	2372	17.4	0.1	19	1	ADR76037	Human apolipoprote
2300	18	0.1	19	1	ADR80250	Human apolipoprote	2373	17.4	0.1	19	1	ADR76513	Human apolipoprote
2301	18	0.1	19	1	ADR77306	Human apolipoprote	2374	17.4	0.1	19	1	ADR78463	Human apolipoprote
2302	18	0.1	20	1	AAV68372	Adapter primer oli	2375	17.4	0.1	19	1	ADR78181	Human apolipoprote
2303	18	0.1	20	1	AAV68519	ISSR-related PCR p	2376	17.4	0.1	19	1	ADR79150	Human apolipoprote
2304	18	0.1	20	1	ABZ85596	Human oligonucleot	2377	17.4	0.1	20	1	ABZ31489	Candida albicans G
2305	18	0.1	20	1	ABD21826	Human oligonucleot	2378	17.4	0.1	20	1	ABZ85595	Human oligonucleot
c2306	18	0.1	21	1	AAQ14196	Human stannocalci	2379	17.4	0.1	20	1	ABZ86076	Human stannocalci
c2307	18	0.1	21	1	ABZ75647	Oligonucleotide pr	2380	17.4	0.1	20	1	ABD21825	Human stannocalci
c2308	17.8	0.1	21	1	AAV81927	Caenorhabditis ele	2381	17.4	0.1	20	1	ABD22306	Human stannocalci
2309	17.8	0.1	21	1	AAA37188	Human PRO1315 forw	2382	17.4	0.1	20	1	ADK77766	Chimeric phosphoro
2310	17.8	0.1	21	1	AAFS4275	Primer #26 used in	2383	17.4	0.1	20	1	ADK77702	Chimeric phosphoro
2311	17.8	0.1	21	1	ACD68312	Novel human secret	2384	17.4	0.1	20	1	ADP20499	Transcription fact
2312	17.8	0.1	21	1	ACH04414	Human secreted/tra	2385	17.4	0.1	21	1	ABZ81769	Huntington's disea
2313	17.8	0.1	21	1	ACD67958	Novel human secret	2386	17.4	0.1	23	1	AA571112	Human epithelial c
2314	17.8	0.1	21	1	ADC17974	Human PRO PCR prim	2387	17.2	0.1	22	1	ABK04841	C parvum P68 gene
2315	17.8	0.1	21	1	ADD70620	Human secreted/tra	2388	17.2	0.1	22	1	ABK28709	Human CDC14 PCR pr
2316	17.8	0.1	21	1	ADD39697	Human secreted/tra	2389	17.2	0.1	22	1	ADF50333	PCR primer to ampl
2317	17.8	0.1	21	1	ADD70143	Human secreted/tra	2390	17.2	0.1	22	1	ADQ80053	Human GPCR-T4 rela
2318	17.8	0.1	21	1	ADD38264	Human secreted/tra	2391	17	0.1	18	1	AAS13717	Simple sequence re
2319	17.8	0.1	21	1	ADD39220	Human secreted/tra	2392	17	0.1	18	1	ADO26638	Synthetic leader s
2320	17.8	0.1	21	1	ADD38743	Human secreted/tra	2393	17	0.1	18	1	ADO26610	Synthetic leader s
2321	17.8	0.1	21	1	ADD40174	Human secreted/tra	2394	17	0.1	20	1	ADK73660	Human apolipoprote
2322	17.8	0.1	21	1	ADE50395	Human secreted/tra	2395	16.8	0.1	20	1	ADR75569	PCR primer used to
2323	17.8	0.1	21	1	ADE20007	Human secreted/tra	2396	16.8	0.1	20	1	AAZ05484	Human chromosome 1
2324	17.8	0.1	21	1	ADE49918	Human secreted/tra	2397	16.8	0.1	20	1	ABZ22802	Human heparanase p
2325	17.8	0.1	21	1	ADE21476	Human secreted/tra	2398	16.8	0.1	20	1	ADH18470	2'-MOE gapmer anti
2326	17.8	0.1	21	1	ADP25901	Human secreted/tra	2399	16.8	0.1	20	1	ADH18831	2'-MOE gapmer anti
2327	17.8	0.1	21	1	ADF55794	Human secreted/tra	2400	16.8	0.1	20	1	ADK73660	Chimeric phosphoro
2328	17.8	0.1	21	1	ADH99298	Human secreted/tra	2401	16.8	0.1	20	1	ADO33417	Antisense/mismatch
c2329	17.8	0.1	21	1	ADJ94067	Human secreted/tra	2402	16.8	0.1	20	1	ADO33443	Antisense crab-eat
2330	17.8	0.1	21	1	ADE96478	Tumour-associated	2403	16.8	0.1	20	1	ADO33449	Crab-eating macaqu
2331	17.8	0.1	21	1	ADP25789	Human secreted/tra	2404	16.8	0.1	20	1	ADO33011	Antisense 2'-MOE g
2332	17.8	0.1	21	1	ADP24688	Human secreted/tra	2405	16.8	0.1	20	1	ADO33372	Antisense 2'-MOE g
2333	17.8	0.1	21	1	ADP29424	Human secreted/tra	2406	16.8	0.1	20	1	ADQ39804	Rice SNP primer SE
2334	17.8	0.1	21	1	ADE96955	Human secreted/tra	2407	16.8	0.1	20	1	ADT01087	Novel mutant prote
2335	17.8	0.1	21	1	ADH02993	Human secreted/tra	2408	16.8	0.1	21	1	AAZ73540	Human blaIIelic ma
2336	17.8	0.1	21	1	ADH03947	Human secreted/tra	2409	16.8	0.1	22	1	ADO22149	Real-time PCR prim
2337	17.8	0.1	21	1	ADH03470	Human secreted/tra	2410	16.4	0.1	18	1	AAT28327	Multi-G oligonucle
2338	17.8	0.1	21	1	ADH04424	Human secreted/tra	2411	16.4	0.1	18	1	AAT28332	Multi-G oligonucle
2339	17.8	0.1	21	1	ADH61425	Human secreted/tra	2412	16.4	0.1	18	1	AAAG31144	Antisense oligonuc
2340	17.8	0.1	21	1	ADL94624	Human secreted/tra	2413	16.4	0.1	18	1	AAF26668	Human Smad7 phosph
c2341	17.8	0.1	23	1	AAA61588	Mouse Tespec PRO-1	2414	16.4	0.1	18	1	AAF99474	Immunostimulatory
2342	17.4	0.1	19	1	ADR75562	Human apolipoprote	2415	16.4	0.1	18	1	ABS78145	Angiogenesis inhib
2343	17.4	0.1	19	1	ADR75514	Human apolipoprote	2416	16.4	0.1	18	1	ABL38994	Immunostimulatory
2344	17.4	0.1	19	1	ADR78194	Human apolipoprote	2417	16.4	0.1	18	1	ABA39493	GRAGA-B receptor la
2345	17.4	0.1	19	1	ADR79132	Human apolipoprote	2418	16.4	0.1	18	1	ABL30611	Human HLA genotypi
2346	17.4	0.1	19	1	ADR76426	Human apolipoprote	2419	16.4	0.1	18	1	ABZ81780	Huntington's disea
2347	17.4	0.1	19	1	ADR75915	Human apolipoprote	2420	16.4	0.1	18	1	ABZ81779	Huntington's disea
2348	17.4	0.1	19	1	ADR76269	Human apolipoprote	2421	16.4	0.1	18	1	ACD99919	Immunostimulatory
2349	17.4	0.1	19	1	ADR76360	Human apolipoprote	2422	16.4	0.1	18	1	ACB36976	Immunostimulatory
2350	17.4	0.1	19	1	ADR78523	Human apolipoprote	2423	16.4	0.1	18	1	ACA63218	Toll-like receptor
2351	17.4	0.1	19	1	ADR78533	Human apolipoprote	2424	16.4	0.1	18	1	ADN97298	Primer of the inve
2352	17.4	0.1	19	1	ADR78978	Human apolipoprote	2425	16.4	0.1	18	1	ADN16441	Allele A oligo #4,
2353	17.4	0.1	19	1	ADR75561	Human apolipoprote	2426	16.4	0.1	18	1	ADL16440	Allele A oligo #3,
2354	17.4	0.1	19	1	ADR75577	Human apolipoprote	2427	16.4	0.1	18	1	AAI62789	Human ER-beta anti
2355	17.4	0.1	19	1	ADR78979	Human apolipoprote	2428	16.4	0.1	19	1	AAT39475	Steroidogenesis ac
2356	17.4	0.1	19	1	ADR79883	Human apolipoprote	2429	16.4	0.1	19	1	AAZ76159	Human ELAM-1 anti
2357	17.4	0.1	19	1	ADR75905	Human apolipoprote	2430	16.4	0.1	19	1	AAZ33956	Human ELAM-1 anti
2358	17.4	0.1	19	1	ADR75845	Human apolipoprote	2431	16.4	0.1	19	1	AAA33399	Low adenosine anti
2359	17.4	0.1	19	1	ADR78180	Human apolipoprote	2432	16.4	0.1	19	1	AAF19521	Human ELAM-1 polyn
2360	17.4	0.1	19	1	ADR78154	Human apolipoprote	2433	16.4	0.1	19	1	ADH16316	Human BACE transcr
2361	17.4	0.1	19	1	ADR79044	Human apolipoprote	2434	16.4	0.1	19	1	ADH16641	Human BACE siNA lo
2362	17.4	0.1	19	1	ADR76361	Human apolipoprote	2435	16.4	0.1	19	1	ABZ95215	Human ELAM-1 anti
2363	17.4	0.1	19	1	ADR78179	Human apolipoprote	2436	16.4	0.1	19	1	ABD19166	Human ELAM-1 anti
2364	17.4	0.1	19	1	ADR78295	Human apolipoprote	2437	16.4	0.1	19	1	ADH70599	Human Beta gene r
2365	17.4	0.1	19	1	ADR75536	Human apolipoprote	2438	16.4	0.1	20	1	AAA55807	Human histone deac
2366	17.4	0.1	19	1	ADR78655	Human apolipoprote	2439	16.4	0.1	20	1	AAA66287	Dog genomic marker
2367	17.4	0.1	19	1	ADR76939	Human apolipoprote	2440	16.4	0.1	20	1	AAH43117	Antisense oligo, t
2368	17.4	0.1	19	1	ADR78887	Human apolipoprote	2441	16.4	0.1	20	1	AAH57033	Antisense oligo, t
2369	17.4	0.1	19	1	ADR79131	Human apolipoprote	2442	16.4	0.1	20	1	AAC89537	Human HDAC-2 PCR p

2443	16.4	0.1	20	1	Human HDAC-2 antis	2516	15.8	0.1	20	1	AAD57319	Pseudomonas aerugi
2444	16.4	0.1	20	1	Human CAS gene ant	2517	15.8	0.1	20	1	AAD56488	Human ephrin-A2 cD
2445	16.4	0.1	20	1	Breast-specific BS	2518	15.8	0.1	20	1	AAD56486	Human ephrin-A2 cD
2446	16.4	0.1	20	1	Tapesia acufornisi	c2519	15.8	0.1	20	1	ADH93220	Human gene PCR pri
2447	16.4	0.1	20	1	Tapesia acufornisi	2520	15.8	0.1	20	1	ABZ86069	Human oligonucleot
c2448	16.4	0.1	20	1	Single nucleotide	2521	15.8	0.1	20	1	ABZ86069	Human oligonucleot
2449	16.4	0.1	20	1	Antisense DNA olig	2522	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2450	16.4	0.1	20	1	Antisense DNA olig	2523	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2451	16.4	0.1	20	1	Antisense DNA olig	c2524	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2452	16.4	0.1	20	1	Antisense DNA olig	2525	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2453	16.4	0.1	20	1	Chimeric phosphoro	2526	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2454	16.4	0.1	20	1	Chimeric phosphoro	2527	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2455	16.4	0.1	20	1	Transcription fact	2528	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2456	16.4	0.1	20	1	Human MMP11 DNA an	2529	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2457	16.4	0.1	20	1	Human matrix metal	2530	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2458	16.4	0.1	20	1	Synthetic antisens	2531	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2459	16.4	0.1	20	1	Synthetic antisens	2532	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2460	16.2	0.1	21	1	Exon 4 of an ENAC	2533	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2461	16.2	0.1	21	1	Human polymorphic	2534	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2462	16.2	0.1	21	1	PCR primer used to	2535	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2463	16.2	0.1	21	1	PCR primer hpl-629	2536	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2464	16.2	0.1	21	1	PCR primer for hum	2537	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2465	16.2	0.1	21	1	Synthetic antisens	2538	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2466	16.2	0.1	21	1	PCR primer ZC37986	2539	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2467	16.2	0.1	21	1	Human hpa specific	c2540	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2468	16.2	0.1	21	1	Human heparanase 5	2541	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2469	16	0.1	16	1	Antisense 2'-MOE g	2542	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2470	16	0.1	16	1	Allele specific pr	2543	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2471	16	0.1	17	1	Human CLCA1 gene e	c2544	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2472	16	0.1	17	1	Human CLCA1 gene e	c2545	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2473	16	0.1	17	1	Human CLCA1 gene e	c2546	15.8	0.1	20	1	ABZ86070	Human oligonucleot
2474	16	0.1	18	1	Wnt3 RT-PCR primer	2547	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2475	16	0.1	20	1	Human PD-ABC form	2548	15.8	0.1	20	1	ABZ86070	Human oligonucleot
c2476	16	0.1	20	1	Human PD-ABC form	c2549	15.4	0.1	17	1	AAZ26602	Human protection o
2477	16	0.1	21	1	5-Cys-encoding oli	2550	15.4	0.1	17	1	AAZ26602	Human protection o
c2478	16	0.1	21	1	Glucosidase alpha	2551	15.4	0.1	17	1	AAZ26602	Human protection o
c2479	16	0.1	21	1	OTX1 probe used du	c2552	15.4	0.1	17	1	AAZ26602	Human protection o
c2480	16	0.1	21	1	Human apolipoprote	c2553	15.4	0.1	17	1	AAZ26602	Human protection o
c2481	15.8	0.1	19	1	Human apolipoprote	c2554	15.4	0.1	17	1	AAZ26602	Human protection o
c2482	15.8	0.1	19	1	Human apolipoprote	c2555	15.4	0.1	17	1	AAZ26602	Human protection o
2483	15.8	0.1	19	1	Oligonucleotide co	c2556	15.4	0.1	17	1	AAZ26602	Human protection o
c2484	15.8	0.1	19	1	Primer for G-prote	c2557	15.4	0.1	17	1	AAZ26602	Human protection o
2486	15.8	0.1	19	1	Human G-protein co	c2558	15.4	0.1	17	1	AAZ26602	Human protection o
c2487	15.8	0.1	19	1	Human BNO1 gene ex	c2559	15.4	0.1	17	1	AAZ26602	Human protection o
2488	15.8	0.1	19	1	Human BNO1 gene ex	c2560	15.4	0.1	17	1	AAZ26602	Human protection o
c2489	15.8	0.1	19	1	Human HRI (EGFR)	c2561	15.4	0.1	17	1	AAZ26602	Human protection o
2490	15.8	0.1	19	1	Human HRI (EGFR)	2562	15.4	0.1	17	1	AAZ26602	Human protection o
c2491	15.8	0.1	19	1	Lower strand of cy	2563	15.4	0.1	17	1	AAZ26602	Human protection o
c2492	15.8	0.1	19	1	Upper strand of cy	2564	15.4	0.1	17	1	AAZ26602	Human protection o
2493	15.8	0.1	19	1	Set 2 left PCR pri	2565	15.4	0.1	17	1	AAZ26602	Human protection o
c2494	15.8	0.1	19	1	Human apolipoprote	c2566	15.4	0.1	17	1	AAZ26602	Human protection o
2495	15.8	0.1	19	1	Human apolipoprote	c2567	15.4	0.1	17	1	AAZ26602	Human protection o
c2496	15.8	0.1	19	1	Human apolipoprote	2568	15.4	0.1	17	1	AAZ26602	Human protection o
2497	15.8	0.1	19	1	Human apolipoprote	2569	15.4	0.1	17	1	AAZ26602	Human protection o
c2498	15.8	0.1	19	1	Human apolipoprote	c2570	15.4	0.1	17	1	AAZ26602	Human protection o
c2499	15.8	0.1	19	1	Human apolipoprote	c2571	15.4	0.1	17	1	AAZ26602	Human protection o
2500	15.8	0.1	19	1	Human apolipoprote	c2572	15.4	0.1	17	1	AAZ26602	Human protection o
2501	15.8	0.1	20	1	Type II procollage	c2573	15.4	0.1	17	1	AAZ26602	Human protection o
c2502	15.8	0.1	20	1	Angiotensin-conver	c2574	15.4	0.1	17	1	AAZ26602	Human protection o
2503	15.8	0.1	20	1	Primer for amplif	c2575	15.4	0.1	17	1	AAZ26602	Human protection o
2504	15.8	0.1	20	1	Forward primer aal	c2576	15.4	0.1	17	1	AAZ26602	Human protection o
2505	15.8	0.1	20	1	Mouse IL-5 recepto	2577	15.4	0.1	17	1	AAZ26602	Human protection o
c2506	15.8	0.1	20	1	Human fra-1 mRNA a	c2578	15.4	0.1	17	1	AAZ26602	Human protection o
c2507	15.8	0.1	20	1	Human glycogen syn	c2579	15.4	0.1	17	1	AAZ26602	Human protection o
2508	15.8	0.1	20	1	COL1A1 gene antis	2580	15.4	0.1	17	1	AAZ26602	Human protection o
2509	15.8	0.1	20	1	Human HLA Class I	2581	15.4	0.1	17	1	AAZ26602	Human protection o
2510	15.8	0.1	20	1	PCR primer Snrpn-U	2582	15.4	0.1	17	1	AAZ26602	Human protection o
2511	15.8	0.1	20	1	T. tauschii/wheat	2583	15.4	0.1	17	1	AAZ26602	Human protection o
2512	15.8	0.1	20	1	Candida albicans G	2584	15.4	0.1	17	1	AAZ26602	Human protection o
c2513	15.8	0.1	20	1	Mouse adipose prot	c2585	15.4	0.1	17	1	AAZ26602	Human protection o
2514	15.8	0.1	20	1	Chimeric phosphoro	2586	15.4	0.1	17	1	AAZ26602	Human protection o
2515	15.8	0.1	20	1	Mouse interleukin	2587	15.4	0.1	17	1	AAZ26602	Human protection o
					Human VEGF-1 chim	c2588	15.4	0.1	20	1	ABQ92940	T. tauschii/wheat

c2589	15.4	0.1	20	1	AA037210	Human MEK4 antisense
c2590	15.4	0.1	20	1	AB197495	Capture oligonucleotide
c2591	15.4	0.1	20	1	AB194952	Capture oligonucleotide
c2592	15.4	0.1	20	1	ACC44020	Oligo ISIS 124611
c2593	15.4	0.1	20	1	ACC44907	Human phospholipase
c2594	15.4	0.1	20	1	ADF91112	Microorganism detection
c2595	15.4	0.1	20	1	AB298590	Human tryptase antisense
c2596	15.4	0.1	20	1	AB292541	Human oligonucleotide
c2597	15.4	0.1	20	1	AB287469	Human oligonucleotide
c2598	15.4	0.1	20	1	ABD28771	R44202-derived oligonucleotide
c2599	15.4	0.1	20	1	ABD31621	Human tryptase antisense
c2600	15.4	0.1	20	1	ABD23699	Human myosin X-derived
c2601	15.4	0.1	20	1	ADH54752	Human VEGF-C antisense
c2602	15.4	0.1	20	1	ADH54806	Human VEGF-C target
c2603	15.4	0.1	20	1	AD132993	Antisense 2'-MOE g
c2604	15.4	0.1	20	1	AD133071	Human GPCR 49 antisense
c2605	15.4	0.1	20	1	ADJ60469	Oligonucleotide antisense
c2606	15.4	0.1	20	1	AA152398	Human secretory phospholipase
c2607	15.4	0.1	20	1	ADJ15888	Antisense DNA oligonucleotide
c2608	15.4	0.1	20	1	ADJ15664	Antisense DNA oligonucleotide
c2609	15.4	0.1	20	1	ADK73892	Chimeric phosphorothioate
c2610	15.4	0.1	20	1	ADK80284	Chimeric phosphorothioate
c2611	15.4	0.1	20	1	ADK73597	Chimeric phosphorothioate
c2612	15.4	0.1	20	1	ADK73650	Chimeric phosphorothioate
c2613	15.4	0.1	20	1	ADK78123	Chimeric phosphorothioate
c2614	15.4	0.1	20	1	ADK73783	Chimeric phosphorothioate
c2615	15.4	0.1	20	1	ADM98326	PCR primer used to
c2616	15.4	0.1	20	1	ADO26445	PCR primer CFI for
c2617	15.4	0.1	20	1	ADM11408	Human CDC14A DNA antisense
c2618	15.4	0.1	20	1	ADO01250	Human oligonucleotide
c2619	15.4	0.1	20	1	ADO45958	Human oligonucleotide
c2620	15.4	0.1	20	1	ADO54593	Farnesoid X receptor
c2621	15.4	0.1	20	1	ADO54676	Farnesoid X receptor
c2622	15.4	0.1	20	1	ADO54594	Farnesoid X receptor
c2623	15.4	0.1	20	1	ADO54582	Farnesoid X receptor
c2624	15.4	0.1	20	1	ADN01780	Human HIF1 antisense
c2625	15.4	0.1	20	1	ADN01858	Human HIF1 antisense
c2626	15.4	0.1	20	1	ADN49559	Human TDP-1 antisense
c2627	15.4	0.1	20	1	ADN49634	Human TDP-1 target
c2628	15.4	0.1	20	1	ADR70786	Human cystic fibrosis
c2629	15.4	0.1	20	1	ADP68938	Human DRK2 antisense
c2630	15.2	0.1	20	1	AAQ32847	Probe for the flanking
c2631	15.2	0.1	20	1	AAQ51069	Human glucokinase
c2632	15.2	0.1	20	1	AAQ77805	Meg-Pot primer 7D-
c2633	15.2	0.1	20	1	AAQ10415	Human FK506 binding
c2634	15.2	0.1	20	1	AAQ39983	Interleukin IL-12
c2635	15.2	0.1	20	1	AAV05968	GAPDH upper primer
c2636	15.2	0.1	20	1	AAV16970	Oligonucleotide antisense
c2637	15.2	0.1	20	1	AAZ00607	Human GPC4 exon 9
c2638	15.2	0.1	20	1	AAZ00645	Human GPC4 exon 9A
c2639	15.2	0.1	20	1	AAZ15765	Antisense oligonucleotide
c2640	15.2	0.1	20	1	AAZ15600	Fragment of upstream
c2641	15.2	0.1	20	1	AAZ21358	Recombinant HIV-1
c2642	15.2	0.1	20	1	AAZ06131	PCR primer used to
c2643	15.2	0.1	20	1	AAZ03464	PCR primer used to
c2644	15.2	0.1	20	1	AAZ89173	Seq ID No: 27 of J
c2645	15.2	0.1	20	1	AAZ55764	Human DNA methyltransferase
c2646	15.2	0.1	20	1	AAZ59817	B. thuringiensis W
c2647	15.2	0.1	20	1	AAZ73791	PCR primer JG2A us
c2648	15.2	0.1	20	1	AAH21731	Corynebacterium g
c2649	15.2	0.1	20	1	AAK95224	Human cDNA clone-s
c2650	15.2	0.1	20	1	AAH11514	Human glycogen synthase
c2651	15.2	0.1	20	1	AAZ43158	Human Syn-2 gene
c2652	15.2	0.1	20	1	AAZ61663	Lactobacillus sp 2
c2653	15.2	0.1	20	1	ABK53149	HIV-1 gag gene spe
c2654	15.2	0.1	20	1	AAZ46651	Human ABC11 exon1
c2655	15.2	0.1	20	1	ABN74831	Mouse and mouse ca
c2656	15.2	0.1	20	1	ABA93055	Mouse membrane bou
c2657	15.2	0.1	20	1	ABA98831	Human Syn-2 exon-
c2658	15.2	0.1	20	1	ABT06305	Human NOVX coding
c2659	15.2	0.1	20	1	ABZ22930	Candida albicans G
c2660	15.2	0.1	20	1	ABL94386	Mouse C/EBP beta p
c2661	15.2	0.1	20	1	ABL94252	Human C/EBP beta p

c2662	15.2	0.1	20	1	ABK69264	Chimeric phosphorothioate
c2663	15.2	0.1	20	1	AAZ45511	HIV-1 gag amplification
c2664	15.2	0.1	20	1	AAZ44733	Antisense oligonucleotide
c2665	15.2	0.1	20	1	ADA50028	Sequencing oligonucleotide
c2666	15.2	0.1	20	1	ACA89983	Cardiovascular disease
c2667	15.2	0.1	20	1	AAD53637	Human PTPN2 antisense
c2668	15.2	0.1	20	1	ACF06326	Zebrafish neo revertant
c2669	15.2	0.1	20	1	ADA38281	Antisense oligonucleotide
c2670	15.2	0.1	20	1	AAZ61522	Human inhibitor-kappa
c2671	15.2	0.1	20	1	ACH00564	Mammalian inverted repeat
c2672	15.2	0.1	20	1	ACH00603	Mammalian inverted repeat
c2673	15.2	0.1	20	1	ABX78228	Human bifunctional
c2674	15.2	0.1	20	1	ABZ92414	Human oligonucleotide
c2675	15.2	0.1	20	1	ABZ87961	Human oligonucleotide
c2676	15.2	0.1	20	1	ABZ91629	Human oligonucleotide
c2677	15.2	0.1	20	1	ABZ86074	Human oligonucleotide
c2678	15.2	0.1	20	1	ABZ98591	Human tryptase antisense
c2679	15.2	0.1	20	1	ABZ87426	Human oligonucleotide
c2680	15.2	0.1	20	1	ABZ86072	Human oligonucleotide
c2681	15.2	0.1	20	1	ADA26857	Human H2.0-like homology
c2682	15.2	0.1	20	1	ACC42425	Acyl CoA cholesterol
c2683	15.2	0.1	20	1	ADK17585	Transposon plasmid
c2684	15.2	0.1	20	1	ADK17588	Transposon plasmid
c2685	15.2	0.1	20	1	ADK17587	Transposon plasmid
c2686	15.2	0.1	20	1	ABD24191	Human calmodulin 2
c2687	15.2	0.1	20	1	ABD28644	T84626-derived oligonucleotide
c2688	15.2	0.1	20	1	ABD27859	AA258396-derived oligonucleotide
c2689	15.2	0.1	20	1	ABD22304	Human stanniocalcin
c2690	15.2	0.1	20	1	ABD22302	Human stanniocalcin
c2691	15.2	0.1	20	1	ABD23656	Human myosin X-derived
c2692	15.2	0.1	20	1	ABD31622	Human tryptase antisense
c2693	15.2	0.1	20	1	ADG88532	Bacillus thuringiensis
c2694	15.2	0.1	20	1	ADH18829	2'-MOE gapmer antisense
c2695	15.2	0.1	20	1	ADH18828	2'-MOE gapmer antisense
c2696	15.2	0.1	20	1	ADH18825	2'-MOE gapmer antisense
c2697	15.2	0.1	20	1	ADH67063	Human glucocorticoid
c2698	15.2	0.1	20	1	ADH67457	Human glucocorticoid
c2699	15.2	0.1	20	1	ADH29985	Human dual specificity
c2700	15.2	0.1	20	1	ADH77268	Human PAZ/PIWI domain
c2701	15.2	0.1	20	1	ADH77193	Human PAZ/PIWI domain
c2702	15.2	0.1	20	1	ADH18958	HIV-1 gag2 gene antisense
c2703	15.2	0.1	20	1	ADJ46546	Human requiem antisense
c2704	15.2	0.1	20	1	ADK95691	Primer of the inverted
c2705	15.2	0.1	20	1	ADK94559	Primer of the inverted
c2706	15.2	0.1	20	1	ADK95229	Primer of the inverted
c2707	15.2	0.1	20	1	ADJ60470	Oligonucleotide antisense
c2708	15.2	0.1	20	1	ADJ24186	Human endothelial
c2709	15.2	0.1	20	1	ADK76311	Chimeric phosphorothioate
c2710	15.2	0.1	20	1	ADL32436	Clonase specific PCR
c2711	15.2	0.1	20	1	ADM69363	Plant gene polymerase
c2712	15.2	0.1	20	1	ADL57889	Human ESM-1 antisense
c2713	15.2	0.1	20	1	ADL57906	Human ESM-1 antisense
c2714	15.2	0.1	20	1	ADM14311	Human mPGES-1 chimera
c2715	15.2	0.1	20	1	ADO45959	Human oligonucleotide
c2716	15.2	0.1	20	1	ADO71820	RT-PCR primer used
c2717	15.2	0.1	20	1	ADO71113	CTSL gene forward
c2718	15.2	0.1	20	1	ADO53267	Farnesoid X receptor
c2719	15.2	0.1	20	1	ADO53351	Farnesoid X receptor
c2720	15.2	0.1	20	1	ADO81003	Sheep prion protein
c2721	15.2	0.1	20	1	ADO80957	Cow prion protein
c2722	15.2	0.1	20	1	ADO16652	4 synthesis-period
c2723	15.2	0.1	20	1	ADP76750	Chimeric phosphorothioate
c2724	15.2	0.1	20	1	ADP77105	Chimeric phosphorothioate
c2725	15.2	0.1	20	1	ADP77087	Chimeric phosphorothioate
c2726	15.2	0.1	20	1	ADP12266	Taqman probe set 2
c2727	15.2	0.1	20	1	ADO31253	Human XT-1 gene forward
c2728	15.2	0.1	20	1	ADO33370	Antisense 2'-MOE g
c2729	15.2	0.1	20	1	ADO33418	Antisense/mismatch
c2730	15.2	0.1	20	1	ADO33369	Antisense 2'-MOE g
c2731	15.2	0.1	20	1	ADO33366	Antisense 2'-MOE g
c2732	15.2	0.1	20	1	ADQ31560	Multiplex detection
c2733	15.2	0.1	20	1	ADQ10546	PCR primer 2 for a
c2734	15.2	0.1	20	1	ADK22390	Acyl-coenzyme A synthase



c2881 14.4 0.1 17 1 ABA77561 Beta globin mutati  
 c2882 14.4 0.1 17 1 ABA77562 Beta globin mutati  
 c2883 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav  
 c2884 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav  
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 c2926 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav  
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 c2951 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav  
 c2952 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav  
 c2953 14.4 0.1 17 1 ABL46891 Human GR1D G-cleav

c2954 14.4 0.1 19 1 ADH01575 Protein tyrosine p  
 c2955 14.4 0.1 19 1 ADG75426 Human NOX1-b prote  
 c2956 14.4 0.1 19 1 ADR81854 Hepatitis C virus

## ALIGNMENTS

RESULT 1  
 AAT58427  
 ID AAT58427 standard; DNA; 36 BP.

XX AAT58427;  
 AC AAT58427;

XX 25-MAR-2003 (revised)  
 DT 24-MAR-1997 (first entry)

XX Apolipoprotein B gene promoter probe, Apob-3.

XX mammalian expression shuttle vector; promoter-reporter gene fusion;  
 KW screen; identify; transcription; modulator; multi-cloning site;  
 KW beta-globin leader sequence; luciferase gene; gene expression;  
 KW cardiovascular disease; atherosclerosis; restenosis; thrombosis;  
 KW hypertension; ss.

XX Synthetic.  
 OS US5580722-A.

XX 03-DEC-1996.

XX 07-FEB-1992; 92US-00832905.

XX 18-JUL-1989; 89US-00382712.

XX 18-JUL-1990; 90US-00555196.

XX (ONCO-) ONCOGENE SCI INC.

XX Case CC, Stephenson JR, Pieler C, Liechtfried FE, Foulkes JG;

WPI; 1997-033562/03.

XX Screening assay for modulators of gene expression - relating to

PT cardiovascular diseases.

XX Example C3; Col 69-70; 93pp; English.

CC TS8419-61 are probes used in molecular cloning of cardiovascular gene  
 CC promoters and regulatory elements for insertion into a mammalian  
 CC expression shuttle vector. Mammalian expression shuttle vectors were  
 CC designed to allow the construction of promoter-reporter gene fusions to  
 CC be used in high-throughput screens to identify transcriptionally  
 CC modifying chemicals. The vectors can be used in a claimed screening assay  
 CC for modulators of gene expression relating to cardiovascular diseases.  
 CC e.g. atherosclerosis, restenosis, thrombosis or hypertension. TS8425-27  
 CC are probes used to screen a human leukocyte genomic DNA library in EMBL-3  
 CC for the Apolipoprotein B gene promoter. (Updated on 25-MAR-2003 to  
 CC correct pP field.)

XX Sequence 36 BP; 3 A; 14 C; 15 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 36; DB 1; Length 36;  
 Best Local Similarity 100.0%; Pred. No. 8.8;  
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 123 CTGGCGATGACCCCGAGCCGCGCTGCTGCG 158  
 Db 1 CTGGCGATGACCCCGAGCCGCGCTGCTGCG 36

RESULT 2  
 AAV82538  
 ID AAV82538 standard; DNA; 36 BP.



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PD 08-DEC-1998.
XX
XX 15-AUG-1996; 96US-00700757.
XX
XX 18-JUL-1989; 89US-00382712.
XX
XX 18-JUL-1990; 90US-00555196.
XX
XX 18-JUL-1990; 90MO-US004021.
XX
XX 07-FEB-1992; 92US-00832905.
XX
XX (ONCO-) ONCOGENE SCI INC.
XX
XX Stephenson JR, Liechtfried FE, Pieler C, Case CC, Foulkes JG;
XX
XX WPI; 1999-059041/05.
XX
XX Screening assay using reporter gene construct - for modulators of genes
XX associated with cardiovascular diseases.
XX
XX Disclosure; Col 33; 95pp; English.
XX
XX Oligonucleotide probes AAV82536-38 were used to screen a human leukocyte
XX genomic DNA library for the apolipoprotein B gene. The probes correspond
XX to the 5' end of the gene coding sequence. Apolipoprotein B is associated
XX with the treatment of cardiovascular disease. The specification describes
XX a method for determining if a test compound is capable of specifically
XX transcriptionally modulating the expression of a gene encoding a protein
XX of interest associated with the treatment of cardiovascular disease. The
XX cardiovascular disease may be atherosclerosis, hypertension or
XX reatenosis. The protein of interest may be involved in lipid transport or
XX cellular uptake, in the uptake of modified lipoproteins, in lipid
XX metabolism, in lipid oxidation, or in smooth muscle cell growth.
XX Additional cardiovascular diseases include congestive heart failure,
XX angina, ischemic heart disease, diabetes mellitus, non-insulin-dependent
XX diabetes, thrombophlebitis, stroke, hypercholesterolemia, familial
XX hypercholesterolemia, combined familial hypercholesterolemia,
XX hyperglycaemia or diseases associated with calcium regulation or
XX metabolism. (Updated on 20-MAR-2003 to correct PR field.)
XX
XX Sequence 33 BP; 3 A; 9 C; 12 G; 9 T; 0 U; 0 Other;
Query Match 0.2%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 24 TGAGTGCCTTCTCGTTGCTGCGCTGAGGAG 56
Db 1 TGAGTGCCTTCTCGTTGCTGCGCTGAGGAG 33
RESULT 5
AAT58425
ID AAT58425 standard; DNA; 30 BP.
XX
XX AAT58425;
XX
XX 25-MAR-2003 (revised)
XX 24-MAR-1997 (first entry)
XX
XX Apolipoprotein B gene promoter probe, ApoB-1.
XX
XX mammalian expression shuttle vector; promoter-reporter gene fusion;
XX screen; identify; transcription; modulator; multi-cloning site;
XX beta-globin leader sequence; luciferase gene; gene expression;
XX cardiovascular disease; atherosclerosis; restenosis; thrombosis;
XX hypertension; ss.
XX
XX Synthetic.
XX
XX US5580722-A.
XX
XX 03-DEC-1996.
XX
XX 07-FEB-1992; 92US-00832905.
XX

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XX 18-JUL-1989; 89US-00382712.
XX 18-JUL-1990; 90US-00555196.
XX (ONCO-) ONCOGENE SCI INC.
XX
XX Case CC, Stephenson JR, Pieler C, Liechtfried FE, Foulkes JG;
XX
XX WPI; 1997-033562/03.
XX
XX Screening assay for modulators of gene expression - relating to
XX cardiovascular diseases.
XX
XX Example C3; Col 69-70; 93pp; English.
XX
XX T98419-61 are probes used in molecular cloning of cardiovascular gene
XX promoters and regulatory elements for insertion into a mammalian
XX expression shuttle vector. Mammalian expression shuttle vectors were
XX designed to allow the construction of promoter-reporter gene fusions to
XX be used in high-throughput screens to identify transcriptionally
XX modifying chemicals. The vectors can be used in a claimed screening assay
XX for modulators of gene expression relating to cardiovascular diseases,
XX e.g. atherosclerosis, restenosis, thrombosis or hypertension. T58425-27
XX are probes used to screen a human leukocyte genomic DNA library in EMBL-3
XX for the Apolipoprotein B gene promoter. (Updated on 25-MAR-2003 to
XX correct PR field.)
XX
XX Sequence 30 BP; 5 A; 15 C; 10 G; 0 T; 0 U; 0 Other;
Query Match 0.2%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 43;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 93 GGCGCGCCGAGGAGCGCGCCGAGCGAG 122
Db 1 GGCGCGCCGAGGAGCGCGCCGAGCGAG 30
RESULT 6
AAV82536
ID AAV82536 standard; DNA; 30 BP.
XX
XX AAV82536;
XX
XX 20-MAR-2003 (revised)
XX 09-FEB-1999 (first entry)
XX
XX Probe ApoB-1 used to screen for apolipoprotein B gene.
XX
XX Apolipoprotein B gene; treatment; cardiovascular disease;
XX atherosclerosis; hypertension; restenosis; probe; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX US5846720-A.
XX
XX 08-DEC-1998.
XX
XX 15-AUG-1996; 96US-00700757.
XX
XX 18-JUL-1989; 89US-00382712.
XX 18-JUL-1990; 90US-00555196.
XX 18-JUL-1990; 90MO-US004021.
XX 07-FEB-1992; 92US-00832905.
XX
XX (ONCO-) ONCOGENE SCI INC.
XX
XX Stephenson JR, Liechtfried FE, Pieler C, Case CC, Foulkes JG;
XX
XX WPI; 1999-059041/05.
XX
XX Screening assay using reporter gene construct - for modulators of genes
XX

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PT associated with cardiovascular diseases.  
 XX Disclosure: Col 33; 95pp; English.  
 XX Oligonucleotide probes AAV82536-38 were used to screen a human leukocyte  
 CC genomic DNA library for the apolipoprotein B gene. The probes correspond  
 CC to the 5' end of the gene coding sequence. Apolipoprotein B is associated  
 CC with the treatment of cardiovascular disease. The specification describes  
 CC a method for determining if a test compound is capable of specifically  
 CC transcriptionally modulating the expression of a gene encoding a protein  
 CC of interest associated with the treatment of cardiovascular disease. The  
 CC cardiovascular disease may be atherosclerosis, hypertension or  
 CC restenosis. The protein of interest may be involved in lipid transport or  
 CC cellular uptake, in the uptake of modified lipoproteins, in lipid  
 CC metabolism, in lipid oxidation, or in smooth muscle cell growth.  
 CC Additional cardiovascular diseases include congestive heart failure,  
 CC angina, ischemic heart disease, diabetes mellitus, non-insulin-dependent  
 CC diabetes, thrombophlebitis, stroke, hypercholesterolemia, familial  
 CC hypercholesterolemia, combined familial hypercholesterolemia,  
 CC hyperglycaemia or diseases associated with calcium regulation or  
 CC metabolism. (Updated on 20-MAR-2003 to correct PR field.)  
 XX  
 SQ Sequence 30 BP; 5 A; 15 C; 10 G; 0 T; 0 U; 0 Other;  
 Query Match 0.2%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 43;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 93 GCGCGAGCCGAGGAGCGCCGCCGCGAG 122  
 Db 1 GCGCGAGCCGAGGAGCGCCGCCGCGAG 30  
 RESULT 7  
 AAD54093  
 ID AAD54093 standard; DNA; 30 BP.  
 XX  
 AC AAD54093;  
 XX  
 DT 17-JUN-2003 (first entry)  
 XX  
 DE ApoB71 gene fragment containing SNP.  
 XX  
 KW Microfluidic analysis; biomolecule identification; sample analysis;  
 KW single nucleotide polymorphism; SNP; Genotyping; ApoB71; ds.  
 XX  
 OS Unidentified.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Biotin labelled"  
 XX  
 PN WO200297398-A2.  
 XX  
 PD 05-DEC-2002.  
 XX  
 PF 25-OCT-2001; 2001WO-IB002902.  
 XX  
 PR 25-OCT-2000; 2000US-0243349P.  
 PR 16-JUL-2001; 2001US-0305726P.  
 XX  
 PA (EXIQ-) EXIQON AS.  
 XX  
 PI Jakobsen MH, Kongsbak L;  
 XX  
 DR WPI; 2003-183891/18.  
 XX  
 PT Closed substrate platform has slide element comprising microfluidic  
 PT analysis platform, enclosed within container having inlet port for  
 PT introducing liquid into sample analysis area and vent for removing air  
 PT from container.

XX Example; Page 70; 49pp; English.  
 XX The invention relates to a closed substrate platform which has a slide  
 CC element comprising microfluidic analysis platform, enclosed within  
 CC container having inlet port for introducing liquid into sample analysis  
 CC area and vent for removing air from container. The invention is used for  
 CC identifying a nucleic acid sequence capable of binding to a biomolecule  
 CC such as a nucleic acid sequence or polypeptide. It is useful for  
 CC identifying a polypeptide capable of binding to a biomolecule such as a  
 CC nucleic acid sequence, polypeptide, multimeric polypeptide, an antibody,  
 CC a receptor, a hormone, drug or drug candidate. It is also useful for  
 CC sample analysis, especially liquid, and is useful for detecting DNA  
 CC sequence variation, DNA sequencing, deletion analysis, single nucleotide  
 CC polymorphism (SNP) analysis, gene expression, genotyping, etc. The  
 CC present sequence is ApoB71 gene fragment containing SNP. This sequence is  
 CC used in the exemplification of the invention  
 XX  
 SQ Sequence 30 BP; 9 A; 7 C; 8 G; 6 T; 0 U; 0 Other;  
 Query Match 0.2%; Score 28.4; DB 1; Length 30;  
 Best Local Similarity 96.7%; Pred. No. 70;  
 Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 408 ACCAGCCAGTCCACCCCTGAAAGAGGTGTAT 437  
 Db 1 ACCAGCCAGTCCATCTCTGAAAGAGGTGTAT 30  
 RESULT 8  
 ACC62117  
 ID ACC62117 standard; DNA; 28 BP.  
 XX  
 AC ACC62117;  
 XX  
 DT 20-JUN-2003 (first entry)  
 XX  
 DE Human alipoprotein B PCR probe.  
 XX  
 KW Human; alipoprotein B; ApoB; antilipaemic; antiarteriosclerotic;  
 KW antidiabetic; anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; PCR; probe; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 PR 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2003-268105/26.  
 XX  
 PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 PS Example 13; Page 93; 160pp; English.  
 XX The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits

CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

SQ Sequence 28 BP; 6 A; 8 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.2%; Score 28; DB 1; Length 28;  
 Best Local Similarity 100.0%; Pred. No. 71;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGGATCCTAACACTGGCGG 4666  
 |||||  
 Db 1 CTTGTCAGAGGGATCCTAACACTGGCGG 28

RESULT 9  
 ADH18017  
 ID ADH18017 standard; DNA; 28 BP.  
 AC ADH18017;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE FAM and TAMRA-labelled probe used to analyse human ApoB DNA.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW human; ss; probe.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2003; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Example 13; SEQ ID NO 6; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically

CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the ApoB antisense  
 CC inhibition-related 5'FAM and 3'TAMRA-labelled probe which was used in the  
 CC exemplification of the invention.

SQ Sequence 28 BP; 6 A; 8 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.2%; Score 28; DB 1; Length 28;  
 Best Local Similarity 100.0%; Pred. No. 71;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGGATCCTAACACTGGCGG 4666  
 |||||  
 Db 1 CTTGTCAGAGGGATCCTAACACTGGCGG 28

RESULT 10  
 ADO32558  
 ID ADO32558 standard; DNA; 28 BP.  
 XX  
 AC ADO32558;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE FAM/TAMRA-labelled probe used to analyse human ApoB DNA.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; ss; probe.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

PS Example 13; SEQ ID NO 6; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of  
 CC the FAM/AMRA-labelled probe of the invention which was used to analyse  
 CC human apolipoprotein B (ApoB) DNA.

XX  
 SQ Sequence 28 BP; 6 A; 8 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.2%; Score 28; DB 1; Length 28;  
 Best Local Similarity 100.0%; Pred. No. 71;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTGTGAGAGGATCTTAACACTGGCG 4666  
 |||||  
 Db 1 CTGTGAGAGGATCTTAACACTGGCG 28

## RESULT 11

AAAX21757  
 ID AAX21757 standard; DNA; 24 BP.

XX  
 AC AAX21757;

DT 19-MAY-1999 (first entry)

XX  
 DE ApoB promoter oligo BE.

XX  
 KW Apolipoprotein A-I; apoA-I gene; regulatory sequence; promoter;  
 KW transcription factor; lipid metabolism; atherosclerosis; apoB;  
 KW promoter oligonucleotide; ds.

XX  
 OS Synthetic.

XX  
 PN US5877009-A.

XX  
 PD 02-MAR-1999.

XX  
 PF 28-DEC-1993; 93US-00174672.

XX  
 PR 16-AUG-1991; 91US-00746332.

XX  
 PA (UYBO-) UNIV BOSTON.

XX  
 PI Zannis VI, Cladaras C;

XX  
 DR WPI; 1999-189649/16.

XX  
 PT New isolated oligonucleotide regulatory sequences that control the  
 PT expression of the apolipoprotein A-I gene - useful for identifying and  
 PT characterising regulatory sequences and transcription factors involved in  
 PT apolipoprotein A-I expression, and for the treatment of disorders  
 PT associated with lipid metabolism such as atherosclerosis.

XX  
 PS Example 3; Col 53-54; 73pp; English.

XX  
 CC The invention relates to isolated apolipoprotein A-I (apoA-I) gene  
 CC regulatory sequence elements, designated (A), (B), (C) and (D). Elements  
 CC (A)-(D) consist of nucleotides 212-250, 106-157, 59-86 and 14-44,  
 CC respectively, of the sequence AAX21700, which corresponds to nucleotides  
 CC -233 to +32 of the apoA-I gene. The apoA-I sequences may be used to  
 CC identify and characterize the regulatory sequences and protein  
 CC transcription factors involved in the expression of the apoA-I gene. This  
 CC information will provide methods for altering the expression of that

CC gene, for use in applications to detect and treat disorders related to  
 CC lipid metabolism (e.g. atherosclerosis). Sequences AAX21755 to AAX21758  
 CC represent apoB promoter oligonucleotides

XX  
 SQ Sequence 24 BP; 2 A; 7 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.2%; Score 24; DB 1; Length 24;  
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 32 CTTCTCGTTGCTGCCGTGAGGA 55  
 |||||  
 Db 1 CTTCTCGTTGCTGCCGTGAGGA 24

## RESULT 12

AAI31038/c

ID AAI31038 standard; DNA; 31 BP.

XX  
 AC AAI31038;

DT 04-NOV-2004 (revised)

DT 18-OCT-2001 (first entry)

XX  
 DE Human single nucleotide polymorphism (SNP) MAZ 1.

XX  
 KW Human; resequence; genotype; disease; forensic; paternity testing;  
 KW single nucleotide polymorphism; SNP; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers

FT variation 16

FT /\*tag= a

FT /standard\_name= "single nucleotide polymorphism"

XX  
 PN WO200166800-A2.

XX  
 PD 13-SEP-2001.

XX  
 PF 07-MAR-2001; 2001WO-US007268.

XX  
 PR 07-MAR-2000; 2000US-0187510P.

XX  
 PR 22-MAY-2000; 2000US-0206129P.

XX  
 PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.

XX  
 PI Cargill M, Ireland JS, Lander ES;

XX  
 DR WPI; 2001-522952/57.

XX  
 PT Nucleic acid molecules from the human genome which include polymorphic  
 PT sites, useful in methods for predicting the presence, absence or severity  
 PT of a particular phenotype or disorder (e.g. diabetes) associated with a  
 PT particular genotype.

XX  
 PS Claim 1; Page 124; 145pp; English.

XX  
 CC The invention relates to the identification of nucleic acid molecules  
 CC (AAI29513-AAI31314) from the human genome which include polymorphic sites  
 CC which can predispose individuals to disease. Various genes from a number  
 CC of individuals were resequenced and single nucleotide polymorphisms  
 CC (SNPs) in these genes discovered. The method is useful for predicting the  
 CC presence, absence or severity of a particular phenotype or disorder (e.g.  
 CC diabetes) associated with a particular genotype. The nucleic acids  
 CC containing the polymorphic sites may be useful in forensics and paternity  
 CC testing

XX  
 CC Revised record issued on 04-NOV-2004 : Correction to Feature Table Key

XX  
 SQ Sequence 31 BP; 5 A; 10 C; 16 G; 0 T; 0 U; 0 Other;

XX  
 Query Match 0.2%; Score 23.6; DB 1; Length 31;

```
Best Local Similarity 86.7%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 157 CGCTGCTGGCGCTGCTGCTGCTGCTGCTGC 186
Db 31 CGCTGCTGGCGCTGCTGCTGCTGCTGCTGC 2

RESULT 13
ACC62116/c
ID ACC62116 standard; DNA; 23 BP.
XX
XX
AC ACC62116;
XX
XX
DT 20-JUN-2003 (first entry)
DE Human alipoprotein B reverse PCR primer.
XX
XX Human; alipoprotein B; ApoB; antilipaemic; antiarteriosclerotic;
XX antidiabetic; anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO2003011887-A2.
XX
XX 13-FEB-2003.
XX
XX 30-JUL-2002; 2002WO-US024247.
XX
XX 01-AUG-2001; 2001US-00920033.
XX 30-APR-2002; 2002US-00135985.
XX 15-MAY-2002; 2002US-00147196.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2003-268105/26.
XX
XX New antisense oligonucleotides for modulating apolipoprotein B,
XX especially for preventing or treating atherosclerosis, hyperlipidaemia or
XX diabetes, or for modulating glucose, cholesterol, lipoprotein or
XX triglyceride levels.
XX
XX Example 13; Page 93; 160pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleotides in
XX length that is targeted to a nucleic acid molecule encoding
XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX the expression of a nucleic acid molecule encoding ApoB; or which
XX specifically hybridises with at least an 8-nucleotide portion of an
XX active site on a nucleic acid molecule encoding ApoB. A compound of the
XX invention has antilipaemic, antiarteriosclerotic, antidiabetic,
XX anorectic, and cardiovascular activity. The compound may have a use in
XX gene therapy. The antisense oligonucleotide is useful for treating an
XX animal having a disease or conditions associated with ApoB, e.g. a
XX condition involving abnormal lipid metabolism, a condition involving
XX abnormal cholesterol metabolism, atherosclerosis, or a condition
XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
XX cardiovascular disease). The new compound or the antisense
XX oligonucleotide is also useful for modulating glucose levels
XX (particularly plasma or serum glucose levels) in a human or diabetic
XX animal, or for modulating serum cholesterol levels, lipoprotein levels
XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
```

```
XX SQ Sequence 23 BP; 4 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.2%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4668 CTCATGGAGAGTCCAACTTGAG 4690
Db 23 CTCATGGAGAGTCCAACTTGAG 1

RESULT 14
ADH18016/c
ID ADH18016 standard; DNA; 23 BP.
XX
XX ADH18016;
XX
XX 11-MAR-2004 (first entry)
DE PCR primer SEQ ID 5 used to amplify human ApoB DNA.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX human; ss; PCR; primer.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Example 13; SEQ ID NO 5; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the ApoB antisense
XX inhibition-related PCR primer which was used in the exemplification of
XX the invention.
XX
XX Sequence 23 BP; 4 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.2%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4668 CTCATGGAGAGTCCAACTTGAG 4690
Db 23 CTCATGGAGAGTCCAACTTGAG 1
```

## RESULT 15

ADO32557/c  
 ID ADO32557 standard; DNA; 23 BP.  
 AC ADO32557;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE PCR primer 2 used to amplify human apolipoprotein B (ApoB) DNA.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; ss; PCR; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 13; SEQ ID NO 5; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of  
 CC the PCR primer 2 of the invention which was used to amplify human  
 CC apolipoprotein B (ApoB) DNA.  
 XX  
 SQ Sequence 23 BP; 4 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.2%; Score 23; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4668 CTCAATGGAGAGTCCAACTGAG 4690  
 Db |||||  
 23 CTCAATGGAGAGTCCAACTGAG 1

## RESULT 16

AAA99823/c  
 ID AAA99823 standard; DNA; 22 BP.  
 AC AAA99823;  
 XX  
 DT 25-JAN-2001 (first entry)  
 XX  
 DE Human apo B RT-PCR primer #2.  
 XX  
 KW Human; age-related macular degeneration; AMD; pattern dystrophy;  
 KW North Carolina macular dystrophy; Sorsby's fundus dystrophy;  
 KW Stargadt's disease; Best disease; malattia leventinese; radial drusen;  
 KW Doyne's honeycomb choroiditis; dominant drusen; eye; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200052479-A2.  
 XX  
 PD 08-SEP-2000.  
 XX  
 PF 06-MAR-2000; 2000WO-US005858.  
 XX  
 PR 05-MAR-1999; 99US-0123052P.  
 PR 22-FEB-2000; 2000US-00510230.  
 XX  
 PA (IOWA) UNIV IOWA RES FOUND.  
 XX  
 PI Hageman GS, Mullins RF;  
 XX  
 DR WPI; 2000-594204/56.  
 XX  
 PT Diagnosing or identifying a predisposition to the development of drusen  
 PT associated ocular disorder, such as retinal detachment, comprises  
 PT detecting expression level or activity of drusen associated marker.  
 XX  
 PS Example 7; Page 109; 134pp; English.  
 XX  
 CC The present invention is concerned with methods for the diagnosis and  
 CC treatment of drusen associated ocular disorders, such as age-related  
 CC macular degeneration (AMD), North Carolina macular dystrophy, Sorsby's  
 CC fundus dystrophy, Stargadt's disease, pattern dystrophy, Best disease,  
 CC malattia leventinese, Doyne's honeycomb choroiditis, dominant drusen and  
 CC radial drusen. These diseases are all associated with drusen, which are  
 CC deposits which accumulate between the RPE basal lamina and the inner  
 CC collagenous layer of Bruch's membrane. The primers AAA99818-A99847 were  
 CC used in examples to demonstrate the methods of the invention  
 XX  
 SQ Sequence 22 BP; 4 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.2%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 3.1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3422 CAAGAAATTTACTGAGTGCC 3443  
 Db |||||  
 22 CAAGAAATTTACTGAGTGCC 1

## RESULT 17

AAF29534/c  
 ID AAF29534 standard; DNA; 22 BP.  
 AC AAF29534;  
 XX  
 DT 05-APR-2001 (first entry)  
 XX

```

DE Human Apo B gene PCR antisense primer.
XX Human; antiinflammatory; cardiant; antagonist; Apo B; Apolipoprotein B;
XX age-related macular degeneration; AMD; arterial wall disruptive disorder;
KW AWD; abdominal aortic aneurysm; AAA; thoracic aortic aneurysm; TAA;
KW PCR primer; ss.
XX Homo sapiens.
XX WO200102866-A1.
XX 11-JAN-2001.
XX 22-FEB-2000; 2000WO-US004583.
XX 19-FEB-1999; 99US-0120668P.
XX 19-FEB-1999; 99US-0120822P.
XX 05-MAR-1999; 99US-0123052P.
XX (IOWA ) UNIV IOWA RES FOUND.
XX Hageman GS;
XX WPI; 2001-091867/10.
XX Diagnosing, or determining a predisposition to developing, an arterial
PT wall disruptive disorder by correlation with the incidence of age related
PT macular degeneration (AMD), e.g. by detecting genotypic or phenotypic
PT marker(s) for AMD.
XX Example 6; Page 98b; 148pp; English.
XX The present sequence is one of a number of primers used to identify
CC molecules synthesised by the retina, retinal pigmented epithelium and/or
CC choroid of the eyes of humans with age-related macular degeneration
CC (AMD). This RT-PCR procedure was performed as an example of a method for
CC diagnosing, or determining a predisposition to developing, an arterial
CC wall disruptive disorder (AWDD) by correlation with the incidence of age
CC related macular degeneration. Arterial wall disruptive disorders include
CC aneurysms such as an abdominal aortic aneurysm (AAA), a thoracic aortic
CC aneurysm (TAA), a peripheral aneurysm, a visceral aneurysm, or an
CC intracranial aneurysm. Macular degeneration therapeutics, e.g.
CC antagonists of TNF-alpha, IL-1, GM-CSF, IL-4 or IL-13, are useful for
CC treating or preventing the development of AWDD in humans
XX Sequence 22 BP; 4 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.2%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3422 CAAGAAAATTACTGAGGTCGCC 3443
Db |||||
22 CAAGAAAATTACTGAGGTCGCC 1
RESULT 18
ADI60656/c
ID ADI60656 standard; DNA; 22 BP.
XX AC ADI60656;
XX 22-APR-2004 (first entry)
XX RT-PCR primer #2 for human apolipoprotein B DNA.
XX Human; arterial wall disruptive disorder;
KW age-related macular degeneration; AMD; aortic; peripheral; visceral;
KW intracranial; aneurysm; abdominal aortic aneurysm; AAA;
KW thoracic aortic aneurysm; TAA; inflammatory aneurysm; inflammation;
KW apolipoprotein B; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX Homo sapiens.
OS

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XX US2003149997-A1.
XX 07-AUG-2003.
XX 22-FEB-2000; 2000US-00511008.
XX 19-FEB-1999; 99US-0120668P.
XX 19-FEB-1999; 99US-0120822P.
XX 05-MAR-1999; 99US-0123052P.
XX (HAGE/) HAGEMAN G S.
XX Hageman GS;
XX WPI; 2003-897617/82.
XX Diagnosis of an arterial wall disruptive disorder e.g. an abdominal
PT aortic aneurysm useful e.g. for early or presymptomatic detection uses
PT detection of genotypic or phenotypic markers for macular degeneration in
PT the eye.
XX Example 6; Page 43; 64pp; English.
XX The present invention relates to a method for diagnosing an arterial wall
CC disruptive disorder, or a predisposition to developing such a disorder.
CC The method uses a novel correlation between the disorder and macular
CC degeneration in the eye i.e. the incidence of age-related macular
CC degeneration (AMD). The method comprises detecting one or more genotypic
CC or phenotypic markers for macular degeneration in the eye, indicative of
CC the existence of/predisposition towards an arterial wall disruptive
CC disorder. The method is useful to diagnose, or indicate a predisposition
CC towards, an arterial wall disruptive disorder, e.g. an aortic,
CC peripheral, visceral or intracranial aneurysm (preferably a dissecting
CC aortic aneurysm), and especially an abdominal aortic aneurysm (AAA) or thoracic
CC aneurysm (TAA). Kits are also included. Identification of
CC aneurysms at an early (or presymptomatic) stage enables surgery whilst
CC the aneurysm size is small, reducing the risk of sudden rupture and death
CC (which increases with aneurysm size). It may also reduce the amount of
CC surgery required, since large aneurysms may affect other branching
CC vessels around them, and enables removal of inflammatory aneurysms before
CC the inflammation affects adjacent structures. The method is also useful
CC for non-invasive monitoring e.g. of individuals identified as at risk of
CC developing an aneurysm or to monitor effectiveness of a therapy for an
CC existing aneurysm. The present sequence represents a reverse
CC transcriptase (RT)-PCR primer used in the examples of the present
CC invention.
XX Sequence 22 BP; 4 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.2%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3422 CAAGAAAATTACTGAGGTCGCC 3443
Db |||||
22 CAAGAAAATTACTGAGGTCGCC 1
RESULT 19
ADO43735
ID ADO43735 standard; DNA; 27 BP.
XX AC ADO43735;
XX 29-JUL-2004 (first entry)
XX PCR primer used to amplify SEAP for cloning into pFerX8 and pFerX9.
XX transfection; eukaryotic cell; eukaryotic locus;
XX ferritin heavy chain locus; PCR; primer; ss;
XX secreted alkaline phosphatase; SEAP.
XX

```



CC The invention relates to isolated apolipoprotein A-I (apoA-I) gene  
 CC regulatory sequence elements, designated (A), (B), (C) and (D). Elements  
 CC (A)-(D) consist of nucleotides 212-250, 106-157, 59-86 and 14-44,  
 CC respectively, of the sequence AAX21700, which corresponds to nucleotides  
 CC -233 to +32 of the apoA-I gene. The apoA-I sequences may be used to  
 CC identify and characterize the regulatory sequences and protein  
 CC transcription factors involved in the expression of the apoA-I gene. This  
 CC information will provide methods for altering the expression of that  
 CC gene, for use in applications to detect and treat disorders related to  
 CC lipid metabolism (e.g. atherosclerosis)

XX SQ Sequence 21 BP; 1 A; 6 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 34 TCTCGGTTGCTGCCGCTGAGG 54  
 Db 1 TCTCGGTTGCTGCCGCTGAGG 21

RESULT 22  
 AAA99822  
 ID AAA99822 standard; DNA; 21 BP.

AC AAA99822;

XX 25-JAN-2001 (first entry)

XX Human apo B RT-PCR primer #1.

XX Human; age-related macular degeneration; AMD; pattern dystrophy;  
 KW North Carolina macular dystrophy; Sorby's fundus dystrophy;  
 KW Stargardt's disease; Best disease; malattia leventinese; radial drusen;  
 KW Doyle's honeycomb choroiditis; dominant drusen; eye; PCR primer; ss.

XX Homo sapiens.

XX WO200052479-A2.

XX 08-SEP-2000.

XX 06-MAR-2000; 2000WO-US005858.

XX 05-MAR-1999; 99US-0123052P.

XX 22-FEB-2000; 2000US-00510230.

XX (IOWA ) UNIV IOWA RES FOUND.

XX Hageman GS, Mullins RF;

XX WPI; 2000-594204/56.

XX Diagnosing or identifying a predisposition to the development of drusen  
 PT associated ocular disorder, such as retinal detachment, comprises  
 PT detecting expression level or activity of drusen associated marker.

XX Example 7; Page 109; 134pp; English.

XX The present invention is concerned with methods for the diagnosis and  
 CC treatment of drusen associated ocular disorders, such as age-related  
 CC macular degeneration (AMD), North Carolina macular dystrophy, Sorby's  
 CC fundus dystrophy, Stargardt's disease, pattern dystrophy, Best disease,  
 CC malattia leventinese, Doyle's honeycomb choroiditis, dominant drusen and  
 CC radial drusen. These diseases are all associated with drusen, which are  
 CC deposits which accumulate between the RPE basal lamina and the inner  
 CC collagenous layer of Bruch's membrane. The primers AAA99818-A99847 were  
 CC used in examples to demonstrate the methods of the invention

XX SQ Sequence 21 BP; 6 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2830 TGAACACCAACTTCTTCCACG 2850  
 Db 1 TGAACACCAACTTCTTCCACG 21

RESULT 23

AAF32587

ID AAF32587 standard; DNA; 21 BP.

XX AAF32587;

XX 23-APR-2001 (first entry)

XX Human apolipoprotein B (Apo B) PCR primer SN.

XX Human; albumin; amyloid P; apolipoprotein B; apolipoprotein E; Factor X;  
 KW fibrinogen; immunoglobulin kappa; immunoglobulin lambda; prothrombin;  
 KW diagnosis; macular degeneration; aneurysm;  
 KW arterial wall disruptive disorder; age-related macular degeneration;  
 KW exudative; neovascular; disciform scar; choroidal neovascularisation;  
 KW anti-inflammatory; PCR primer; ss.

XX Homo sapiens.

XX WO200106262-A1.

XX 25-JAN-2001.

XX 22-FEB-2000; 2000WO-US004592.

XX 19-FEB-1999; 99US-0120668P.

XX 19-FEB-1999; 99US-0120822P.

XX 05-MAR-1999; 99US-0123052P.

XX (IOWA ) UNIV IOWA RES FOUND.

XX Hageman GS;

XX WPI; 2001-168472/17.

XX Diagnosing macular degeneration (MD), especially age-related macular  
 PT degeneration (AMD), exudative or neovascular forms, by detecting a marker  
 PT for arterial wall disruptive disorder, particularly abdominal aortic  
 PT aneurysm.

XX Example 6; Page 97B; 142pp; English.

XX The present invention describes a method (M1) for the diagnosis of  
 CC macular degeneration (MD), or detecting predisposition for developing MD.  
 CC The method comprises detecting one or more markers (I) of an arterial  
 CC wall disruptive disorder (AWDD). Also described are: (1) a kit for  
 CC diagnosing MD comprising sequence specific primers for a region  
 CC containing a polymorphism indicative of AWDD, reagents for amplification  
 CC and for analysis of amplified nucleic acid; (2) diagnosing (M2) MD  
 CC comprising an immunoassay that uses an antibody specific for a gene  
 CC product indicative of AWDD; (3) kit for (M2); (4) treatment or prevention  
 CC of MD or AMD by administering an agent (II), especially an  
 CC antiinflammatory agent, effective against AWDD; (5) pharmaceutical  
 CC composition for method (4); (6) identifying (II); and (7) an animal  
 CC model (III) for MD. The method can diagnose age-related MD or the  
 CC exudative or neovascular form of MD, characterised by disciform scars  
 CC and/or choroidal neovascularisation, or a precursor phenotype. Also  
 CC agents (II), particularly anti-inflammatories, that are effective against  
 CC AWDD are used to treat or prevent MD. The present sequence represents a  
 CC PCR primer for apolipoprotein B (Apo B), which is used in an example from  
 CC the present invention

XX SQ Sequence 21 BP; 6 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 21; DB 1; Length 21;



Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2830 TGAACACCAACTTCTTCCACG 2850  
Db 1 TGAACACCAACTTCTTCCACG 21

RESULT 24  
AAF32588/c  
ID AAF32588 standard; DNA; 21 BP.  
XX  
AC AAF32588;  
XX  
DT 23-APR-2001 (first entry)  
XX  
DE Human apolipoprotein B (Apo B) PCR primer AS.  
XX  
KW Human; albumin; amyloid P; apolipoprotein B; apolipoprotein E; Factor X;  
KW fibrinogen; immunoglobulin kappa; immunoglobulin lambda; prothrombin;  
KW diagnosis; macular degeneration; aneurysm;  
KW arterial wall disruptive disorder; age-related macular degeneration;  
KW exudative; neovascular; disciform scar; choroidal neovascularisation;  
KW anti-inflammatory; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200106262-A1.  
XX  
PD 25-JAN-2001.  
XX  
PF 22-FEB-2000; 2000WO-US0004592.  
XX  
PR 19-FEB-1999; 99US-0120668P.  
PR 19-FEB-1999; 99US-0120822P.  
PR 05-MAR-1999; 99US-0123052P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Hageman GS;  
XX  
DR WPI; 2001-168472/17.  
XX  
PT Diagnosing macular degeneration (MD), especially age-related macular  
PT degeneration (AMD), exudative or neovascular forms, by detecting a marker  
PT for arterial wall disruptive disorder, particularly abdominal aortic  
PT aneurysm.  
XX  
PS Example 6; Page 97B; 142pp; English.  
XX  
CC The present invention describes a method (M1) for the diagnosis of  
CC macular degeneration (MD), or detecting predisposition for developing MD.  
CC The method comprises detecting one or more markers (I) of an arterial  
CC wall disruptive disorder (AWDD). Also described are: (1) a kit for  
CC diagnosing MD comprising sequence specific primers for a region  
CC containing a polymorphism indicative of AWDD, reagents for amplification  
CC and for analysis of amplified nucleic acid; (2) diagnosing (M2) MD  
CC comprising an immunoassay that uses an antibody specific for a gene  
CC product indicative of AWDD; (3) kit for (M2); (4) treatment or prevention  
CC of MD or AMD by administering an agent (II), especially an  
CC anti-inflammatory agent, effective against AWDD; (5) pharmaceutical  
CC composition for method (4); (6) identifying (II); and (7) an animal  
CC model (III) for MD. The method can diagnose age-related MD or the  
CC exudative or neovascular form of MD, characterised by disciform scars  
CC and/or choroidal neovascularisation, or a precursor phenotype. Also  
CC agents (III), particularly anti-inflammatories, that are effective against  
CC AWDD are used to treat or prevent MD. The present sequence represents a  
CC PCR primer for apolipoprotein B (Apo B), which is used in an example from  
CC the present invention  
XX  
SQ Sequence 21 BP; 4 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2830 TGAACACCAACTTCTTCCACG 2850  
Db 1 TGAACACCAACTTCTTCCACG 21

RESULT 26

Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3423 AAGAAATTTACTGAGGTGCCC 3443  
Db 21 AAGAAATTTACTGAGGTGCCC 1

RESULT 25  
AAF29533  
ID AAF29533 standard; DNA; 21 BP.  
XX  
AC AAF29533;  
XX  
DT 05-APR-2001 (first entry)  
XX  
DE Human Apo B gene PCR sense primer.  
XX  
KW Human; antiinflammatory; cardiant; antagonist; Apo B; Apolipoprotein B;  
KW age-related macular degeneration; AMD; arterial wall disruptive disorder;  
KW AWDD; abdominal aortic aneurysm; AAA; thoracic aortic aneurysm; TAA;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200102866-A1.  
XX  
PD 11-JAN-2001.  
XX  
PF 22-FEB-2000; 2000WO-US004583.  
XX  
PR 19-FEB-1999; 99US-0120668P.  
PR 19-FEB-1999; 99US-0120822P.  
PR 05-MAR-1999; 99US-0123052P.  
XX  
PA (IOWA ) UNIV IOWA RES FOUND.  
XX  
PI Hageman GS;  
XX  
DR WPI; 2001-091867/10.  
XX  
PT Diagnosing, or determining a predisposition to developing, an arterial  
PT wall disruptive disorder by correlation with the incidence of age related  
PT macular degeneration (AMD), e.g. by detecting genotypic or phenotypic  
PT marker(s) for AMD.  
XX  
PS Example 6; Page 98b; 148pp; English.  
XX  
CC The present sequence is one of a number of primers used to identify  
CC molecules synthesised by the retina, retinal pigmented epithelium and/or  
CC choroid of the eyes of humans with age-related macular degeneration  
CC (AMD). This RT-PCR procedure was performed as an example of a method for  
CC diagnosing, or determining a predisposition to developing, an arterial  
CC wall disruptive disorder (AWDD) by correlation with the incidence of age  
CC related macular degeneration. Arterial wall disruptive disorders include  
CC aneurysms such as an abdominal aortic aneurysm (AAA), a thoracic aortic  
CC aneurysm (TAA), a peripheral aneurysm, a visceral aneurysm, or an  
CC intracranial aneurysm. Macular degeneration therapeutics, e.g.  
CC antagonists of TNF-alpha, IL-1, GM-CSF, IL-4 or IL-13, are useful for  
CC treating or preventing the development of AMD in humans  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2830 TGAACACCAACTTCTTCCACG 2850  
Db 1 TGAACACCAACTTCTTCCACG 21

```

ABX09243
ID  ABX09243 standard; DNA; 21 BP.
XX
AC  ABX09243;
XX
XX  22-JAN-2003 (first entry)
XX
DE  Arteriosclerosis-detecting probe from APOB #1.
XX
XX  Arteriosclerosis; diagnosis; hybridisation; synergism; gene therapy;
XX  mutation; probe; ss.
XX
OS  Homo sapiens.
XX
PN  WO200272882-A2.
XX
XX  19-SEP-2002.
XX
XX  13-MAR-2002; 2002WO-EP002780.
XX
XX  13-MAR-2001; 2001DE-01011925.
XX
XX  (OGHA-) OGHAM GMBH.
XX
XX  Cullen P, Seedorf U;
XX
XX  WPI; 2002-723374/78.
XX
XX  Determining genetic risk of arteriosclerosis, for clinical diagnosis,
XX  comprises hybridizing patient nucleic acid with an array of probes
XX  derived from risk-associated reference genes and their mutations.
XX
XX  Example 1; Page 119; 146pp; German.
XX
XX  This invention describes a novel method for determining the genetic risk
XX  of arteriosclerosis both for clinical diagnosis and for population
XX  studies. The method comprises: (i) selecting risk-associated reference
XX  nucleic acid sequences, including their functionally characterizing
XX  mutations; (ii) applying probes from these sequences, or their
XX  complements, to a carrier; (iii) hybridising the probes with a nucleic
XX  acid from (or synthesised from) a patient sample; and (iv) detecting and
XX  evaluating the hybridisation pattern. The method provides a quick,
XX  inexpensive and informative diagnosis, and makes possible a
XX  multifactorial analysis for detecting e.g. synergism between different
XX  mutations or mutations that when present alone carry no risk but are risk
XX  -associated in presence of other mutations. The results may be combined
XX  with known risk-assessment methods to provide a more reliable diagnosis,
XX  especially important with new therapeutic methods (e.g. gene therapy)
XX  that are directed against specific genes. All relevant mutations in a
XX  reference sequence can be screened for in a single test and the method is
XX  well suited to automation. ABX09147-ABX09676 represent probes used to
XX  illustrate the method of the invention
XX
SQ  Sequence 21 BP; 8 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
    Query Match      0.1%; Score 21; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 3.8e+02;
    Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  4469 AGTCTCAAAAGGTTTACTAAT 4489
    |||||
Db  1 AGTCTCAAAAGGTTTACTAAT 21

RESULT 27
ADI60655
ID  ADI60655 standard; DNA; 21 BP.
XX
XX  ADI60655;
XX
XX  22-APR-2004 (first entry)
XX
DE  RT-PCR primer #1 for human apolipoprotein B DNA.

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XX
KW  Human; arterial wall disruptive disorder;
KW  age-related macular degeneration; AMD; aortic; peripheral; visceral;
KW  intracranial; aneurysm; abdominal aortic aneurysm; AAA;
KW  thoracic aortic aneurysm; TAA; inflammatory aneurysm; inflammation;
KW  apolipoprotein B; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX
OS  Homo sapiens.
XX
XX  US2003149997-A1.
XX
XX  07-AUG-2003.
XX
XX  22-FEB-2000; 2000US-00511008.
XX
XX  19-FEB-1999; 99US-0120668P.
XX  19-FEB-1999; 99US-0120822P.
XX  05-MAR-1999; 99US-0123052P.
XX
XX  (HAGE/) HAGEMAN G S.
XX
XX  Hageman GS;
XX
XX  WPI; 2003-897617/82.
XX
XX  Diagnosis of an arterial wall disruptive disorder e.g. an abdominal
XX  aortic aneurysm useful e.g. for early or presymptomatic detection in
XX  detection of genotypic or phenotypic markers for macular degeneration in
XX  the eye.
XX
XX  Example 6; Page 43; 64pp; English.
XX
XX  The present invention relates to a method for diagnosing an arterial wall
XX  disruptive disorder, or a predisposition to developing such a disorder.
XX  The method uses a novel correlation between the disorder and macular
XX  degeneration in the eye i.e. the incidence of age-related macular
XX  degeneration (AMD). The method comprises detecting one or more genotypic
XX  or phenotypic markers for macular degeneration in the eye, indicative of
XX  the existence of/predisposition towards an arterial wall disruptive
XX  disorder. The method is useful to diagnose, or indicate a predisposition
XX  towards, an arterial wall disruptive disorder, e.g. an aortic,
XX  peripheral, visceral or intracranial aneurysm (preferably a dissecting
XX  aneurysm), and especially an abdominal aortic aneurysm (AAA) or thoracic
XX  aortic aneurysm (TAA). Kits are also included. Identification of
XX  aneurysms at an early (or presymptomatic) stage enables surgery whilst
XX  the aneurysm size is small, reducing the risk of sudden rupture and death
XX  (which increases with aneurysm size). It may also reduce the amount of
XX  surgery required, since large aneurysms may affect other branching
XX  vessels around them, and enables removal of inflammatory aneurysms before
XX  the inflammation affects adjacent structures. The method is also useful
XX  for non-invasive monitoring e.g. of individuals identified as at risk of
XX  developing an aneurysm or to monitor effectiveness of a therapy for an
XX  existing aneurysm. The present sequence represents a reverse
XX  transcriptase (RT)-PCR primer used in the examples of the present
XX  invention.
XX
SQ  Sequence 21 BP; 6 A; 8 C; 2 G; 5 T; 0 U; 0 Other;
    Query Match      0.1%; Score 21; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 3.8e+02;
    Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2830 TGAACACCACTTCTTCCACG 2850
    |||||
Db  1 TGAACACCACTTCTTCCACG 21

RESULT 28
ACC62115
ID  ACC62115 standard; DNA; 21 BP.
XX
XX  ACC62115;
XX
XX  22-APR-2004 (first entry)
XX
DE  RT-PCR primer #1 for human apolipoprotein B DNA.

```

DT 20-JUN-2003 (first entry)  
 XX Human alipoprotein B forward PCR primer.  
 XX  
 KW Human; alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic;  
 KW anti-diabetic; anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003011887-A2.  
 PN 13-FEB-2003.  
 PD  
 XX  
 XX 30-JUL-2002; 2002WO-US024247.  
 XX  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 13-MAY-2002; 2002US-00147196.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke RM, Graham MJ;  
 XX WPI; 2003-268105/26.  
 XX  
 DR New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 XX Example 13; Page 93; 160pp; English.  
 PS  
 XX The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention  
 XX  
 SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4616 TGCTAAAGGCACATATGGCCT 4636  
 DB 1 TGCTAAAGGCACATATGGCCT 21  
 RESULT 29  
 ADL25050

ID ADL25050 standard; DNA; 21 BP.  
 XX  
 AC ADL25050;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Intestinal epithelium/peyer's patch M cell-associated PCR primer #195.  
 XX  
 KW intestinal epithelium cell development; peyer's patch M cell development;  
 KW inflammatory bowel disease; glutenenteropathy; infectious disease;  
 KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;  
 KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;  
 KW immune system disorder; hypersensitivity; anaphylaxis;  
 KW blood group incompatibility; ss; human; PCR; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200280852-A2.  
 PN 17-OCT-2002.  
 PD  
 XX 04-APR-2002; 2002WO-US010873.  
 PF 04-APR-2001; 2001US-0281416P.  
 PR (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
 PA  
 PI Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;  
 XX WPI; 2003-075470/07.  
 DR  
 XX Novel isolated or purified polypeptide encoded by genes associated with  
 PT intestinal epithelium or M cell development, differentiation or function,  
 PT useful for treating autoimmune diseases and infectious diseases.  
 PT  
 XX Disclosure; SEQ ID NO 560; 152pp; English.  
 PS  
 XX The invention comprises DNA sequences which are associated with  
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the  
 CC invention are useful for assessing, modifying, modulating or regulating  
 CC intestinal epithelium or M cell development. The DNA sequences of the  
 CC invention are also useful in the treatment of: inflammatory bowel  
 CC disease, glutenenteropathy, infectious diseases, autoimmune diseases  
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's  
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),  
 CC diseases or disorders of the immune system, hypersensitivity,  
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence  
 CC represents a PCR primer that was used to amplify an intestinal  
 CC epithelium/peyer's patch M cell-associated DNA sequence of the invention.  
 XX  
 SQ Sequence 21 BP; 6 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3558 GCCAAACTGCTTCTCCAAATG 3578  
 DB 1 GCCAAACTGCTTCTCCAAATG 21  
 RESULT 30  
 ADL25051/c  
 ID ADL25051 standard; DNA; 21 BP.  
 XX  
 AC ADL25051;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Intestinal epithelium/peyer's patch M cell-associated PCR primer #196.  
 XX  
 KW intestinal epithelium cell development; peyer's patch M cell development;  
 KW inflammatory bowel disease; glutenenteropathy; infectious disease;

KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;  
 KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;  
 KW immune system disorder; hypersensitivity; anaphylaxis;  
 XX blood group incompatibility; ss; human; PCR; primer.  
 XX Homo sapiens.  
 OS  
 PN WO200280852-A2.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 04-APR-2002; 2002WO-US010873.  
 PF  
 XX 04-APR-2001; 2001US-0281416P.  
 PR  
 XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.  
 PA  
 XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;  
 PI  
 XX WPI; 2003-075470/07.  
 DR  
 XX Novel isolated or purified polypeptide encoded by genes associated with  
 PT intestinal epithelium or M cell development, differentiation or function,  
 PT useful for treating autoimmune diseases and infectious diseases.  
 PT  
 XX Disclosure; SEQ ID NO 561; 152pp; English.  
 PS  
 XX The invention comprises DNA sequences which are associated with  
 CC intestinal epithelium and peyer's patch M cells. The DNA sequences of the  
 CC invention are useful for assessing, modifying, modulating or regulating  
 CC intestinal epithelium or M cell development. The DNA sequences of the  
 CC invention are also useful in the treatment of: inflammatory bowel  
 CC disease, glutenenteropathy, infectious diseases, autoimmune diseases  
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's  
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),  
 CC diseases or disorders of the immune system, hypereensitivity,  
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence  
 CC represents a PCR primer that was used to amplify an intestinal  
 CC epithelium/peyer's patch M cell-associated DNA sequence of the invention.  
 XX  
 SQ Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3598 ATGGCTCCACAGTTTCCAAGA 3618  
 Db 21 ATGGCTCCACAGTTTCCAAGA 1  
 |||||  
 RESULT 31  
 ADM92779/c  
 ID ADM92779 standard; DNA; 21 BP.  
 XX  
 AC ADM92779;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE SNP-containing cardiovascular associated gene primer #109.  
 XX  
 KW SNP; single nucleotide polymorphism; cardiovascular associated gene;  
 KW allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;  
 KW restenosis; arterial inflammation; myocardial infarction; stroke; primer;  
 KW ss.  
 XX  
 XX Homo sapiens.  
 OS  
 PN WO2003057911-A2.  
 XX  
 PD 17-JUL-2003.  
 XX  
 XX 07-JAN-2003; 2003WO-EP0000060.  
 PF

XX 08-JAN-2002; 2002EP-00000153.  
 PR (FARB ) BAYER AG.  
 PA  
 XX Stropp U, Schwes S, Kallabis H;  
 PI  
 XX WPI; 2003-577532/54.  
 DR  
 XX New isolated polynucleotides comprising single nucleotide polymorphisms  
 PT of the cardiovascular gene, useful for assessing predisposition or  
 PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,  
 PT restenosis or stroke.  
 PT  
 XX Disclosure; Page 70; 187pp; English.  
 PS  
 XX The invention relates an isolated polynucleotide (I) encoded by a  
 CC cardiovascular associated (CA) gene, having allelic variation contained  
 CC in a functional surrounding like full length cDNA for CA gene  
 CC polypeptide, and with or without the CA gene promoter sequence. (I) is a  
 CC polynucleotide comprising single nucleotide polymorphisms predicting  
 CC cardiovascular disease. The polynucleotides are useful for assessing  
 CC predisposition or susceptibility to a cardiovascular disease, e.g.  
 CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial  
 CC inflammation, myocardial infarction, and stroke. These may also be used  
 CC to predict personal medication schemes omitting adverse drug reactions, the  
 CC or as probes for detecting genetic polymorphisms and as templates for the  
 CC recombinant production of normal or variant peptides/polypeptides encoded  
 CC by the genes. This sequence corresponds to a PCR primer to amplify one of  
 CC the genes of the invention.  
 CC  
 SQ Sequence 21 BP; 7 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2026 TCTCTCGGAACACTCAACTCT 2046  
 Db 21 TCTCTCGGAACACTCAACTCT 1  
 |||||  
 RESULT 32  
 ADH18015  
 ID ADH18015 standard; DNA; 21 BP.  
 XX  
 AC ADH18015;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE PCR primer SEQ ID 4 used to amplify human ApoB DNA.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW human; ss; PCR; primer.  
 XX  
 OS Homo sapiens.  
 OS  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR

XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Example 13; SEQ ID NO 4; 405pp; English.  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridizes with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic, anti-  
CC diant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the ApoB antisense  
CC inhibition-related PCR primer which was used in the exemplification of  
CC the invention.  
XX  
SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4616 TGCTAAAGGCACATATGGCCT 4636  
DB 1 TGCTAAAGGCACATATGGCCT 21  
RESULT 33  
ID ADO32556  
AC ADO32556; standard; DNA; 21 BP.  
XX  
XX 12-AUG-2004 (first entry)  
XX PCR primer 1 used to amplify human apolipoprotein B (ApoB) DNA.  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic; hypotensive;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; ss; PCR; primer.  
XX  
OS Homo sapiens.  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX

PS Example 13; SEQ ID NO 4; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridizes to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of  
CC the PCR primer 1 of the invention which was used to amplify human  
CC apolipoprotein B (ApoB) DNA.  
XX  
SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4616 TGCTAAAGGCACATATGGCCT 4636  
DB 1 TGCTAAAGGCACATATGGCCT 21  
RESULT 34  
ID ABX03797  
XX ABX03797 standard; cDNA; 24 BP.  
XX  
XX ABX03797;  
XX  
XX 09-JAN-2003 (first entry)  
XX  
XX DNA encoding secreted protein signal peptide sequence #6.  
XX Differential display method; leucine-rich motif; transmembrane protein;  
KW secreted protein; secreted protein signal peptide; ss.  
XX Unidentified.  
XX  
XX WO200259259-A2.  
XX  
XX 01-AUG-2002.  
XX  
XX 23-JAN-2002; 2002WO-IL000071.  
XX  
XX 23-JAN-2001; 2001US-0263158P.  
XX  
XX (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.  
XX  
XX Wreschner DH;  
XX  
XX WPI; 2002-599769/64.  
XX  
XX P-PSDB; ABG98326.  
XX  
XX Differential display method for identifying secreted or transmembrane  
PT protein, comprises contacting a DNA with a first primer that hybridizes  
PT to a sequence coding for a leucine-rich motif and with a second  
PT oligonucleotide primer.  
XX  
XX Disclosure; Fig 2; 37pp; English.  
XX



CC viral infection. The present sequence is a PCR primer used for amplifying  
 CC Apo B71 DNA. This sequence is used in the exemplification of the  
 CC invention

XX Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 387 CTCTGCAGCTTCATCCTGAA 406  
 DB 1 CTCTGCAGCTTCATCCTGAA 20

RESULT 37  
 AAD48322/c  
 ID AAD48322 standard; DNA; 20 BP.  
 XX AC AAD48322;  
 AC AAD48322;  
 DT 24-FEB-2003 (first entry)  
 XX Apo B71 DNA amplifying reverse PCR primer.  
 XX Single nucleotide polymorphism; SNP; antisense therapy; viral infection;  
 KW PCR; primer; ss.  
 KW Unidentified.  
 OS EP1247815-A2.  
 PN 09-OCT-2002.  
 PD 25-MAR-2002; 2002EP-00388025.  
 XX 25-MAR-2001; 2001US-0278598P.  
 PR (EXTQ-) EXIQON AS.  
 PA Jakobsen MH, Kongsbak L, Pfundheller H;  
 PI WPI; 2003-042042/04.  
 DR Chimeric oligonucleotide useful as primer in nucleic acid extension and  
 PT amplification reactions and as capture probe in single nucleotide  
 PT polymorphism assays, has non-modified and modified nucleic acid residues.  
 XX Example 1; Page 8; 12pp; English.

PS The invention relates to chimeric oligonucleotide containing modified and  
 CC non-modified nucleic acid residues which are useful as primer in nucleic  
 CC acid extension and amplification reactions and as capture probe in single  
 CC nucleotide polymorphism (SNP) assays. Multiple primers are used in  
 CC multiplex PCR. The invention is useful in diagnostic purposes, as probes  
 CC in the purification, isolation and detection of pathogenic organisms such  
 CC as virus, bacteria or fungi, as generic tools for purification,  
 CC isolation, amplification and detection of nucleic acids from groups of  
 CC related species such as for instance RNA from gram- positive or gram  
 CC negative bacteria, fungi, mammalian cells. It is also useful as an  
 CC aptamer in molecular diagnostic e.g. in RNA mediated catalytic processes,  
 CC in specific binding of antibiotics, drugs, amino acids, peptides,  
 CC structural proteins, protein receptors, saccharides, enzymes,  
 CC polysaccharides, biological cofactors, nucleic acids, or triphosphates or  
 CC in the separation of enantiomers from racemic mixtures by stereospecific  
 CC binding. It is also used in antisense therapy for treating diseases e.g.  
 CC viral infection. The present sequence is a PCR primer used for amplifying  
 CC Apo B71 DNA. This sequence is used in the exemplification of the  
 CC invention

SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 430 AGGTGTATGGCTTCAACCT 449  
 DB 20 AGGTGTATGGCTTCAACCT 1

RESULT 38  
 ACC62129/c  
 ID ACC62129 standard; DNA; 20 BP.  
 XX AC ACC62129;  
 AC ACC62129;  
 DT 20-JUN-2003 (first entry)  
 XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 19.  
 XX alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX Synthetic.  
 OS WO2003011887-A2.  
 PN 13-FEB-2003.  
 PD 30-JUL-2002; 2002WO-US024247.  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke RM, Graham MJ;  
 PI WPI; 2003-268105/26.  
 DR New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX Example 15; Page 96; 160pp; English.

PS The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

CC preventing or delaying the onset of a disease or condition associated  
CC with ApoB, or the onset of an increase in glucose levels in the animal or  
CC human. The present sequence is used in the exemplification of the  
CC invention

XX  
SQ Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e-02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 181 TGCTGCTGCTGCGGGC 200  
DB 20 TGCTGCTGCTGCGGGC 1

RESULT 40  
ACC62137/c  
ID ACC62137 standard; DNA; 20 BP.  
XX  
XX ACC62137;  
XX  
DT 20-JUN-2003 (first entry)  
XX  
DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 26.  
XX  
XX alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
KW glucose; antisense oligonucleotide; ss.  
XX  
XX Synthetic.  
OS  
XX  
XX WO2003011887-A2.  
PN  
XX  
XX 13-FEB-2003.  
PD  
XX  
XX 30-JUL-2002; 2002WO-US024247.  
PF  
PP  
XX  
XX 01-AUG-2001; 2001US-00920033.  
PR  
XX 30-APR-2002; 2002US-00135985.  
PR  
XX 15-MAY-2002; 2002US-00147196.  
PR  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX  
XX WPI; 2003-268105/26.  
DR  
XX  
XX New antisense oligonucleotides for modulating apolipoprotein B,  
PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
PT triglyceride levels.

XX  
XX Example 15; Page 96; 160pp; English.

XX  
XX The invention relates to a novel compound that is 8-50 nucleotides in  
CC length that is targeted to a nucleic acid molecule encoding  
CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
CC the expression of a nucleic acid molecule encoding ApoB; or which  
CC specifically hybridises with at least an 8-nucleotide portion of an  
CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
CC anorectic, and cardiovascular activity. The compound may have a use in  
CC gene therapy. The antisense oligonucleotide is useful for treating an  
CC animal having a disease or conditions associated with ApoB, e.g. a  
CC condition involving abnormal lipid metabolism, a condition involving  
CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
CC cardiovascular disease). The new compound or the antisense  
CC oligonucleotide is also useful for modulating glucose levels.



CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention  
 XX  
 SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 911 CAAGGAGCAACACTCTTCC 930  
 Db 20 CAAGGAGCAACACTCTTCC 1  
 RESULT 41  
 ACC62149/c  
 ID ACC62149 standard; DNA; 20 BP.  
 XX  
 AC ACC62149;  
 XX  
 DT 20-JUN-2003 (first entry)  
 XX  
 DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 38.  
 XX  
 KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 OS  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 PR 01-AUG-2001; 2001US-00920033.  
 PR 20-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2003-268105/26.  
 XX  
 PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 PS Example 15; Page 96; 160pp; English.  
 XX  
 CC The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition

CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention  
 XX  
 SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2842 TCTTCCACGAGTCGGGTCTG 2861  
 Db 20 TCTTCCACGAGTCGGGTCTG 1  
 RESULT 42  
 ACC62151/c  
 ID ACC62151 standard; DNA; 20 BP.  
 XX  
 AC ACC62151;  
 XX  
 DT 20-JUN-2003 (first entry)  
 XX  
 DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 40.  
 XX  
 KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 OS  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 PR 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2003-268105/26.  
 XX  
 PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 PS Example 15; Page 96; 160pp; English.  
 XX  
 CC The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in

CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention  
 CC  
 CC SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3611 TTCCAAGAGGGTGGCATGGC 3630  
 Db 20 TTCCAAGAGGGTGGCATGGC 1  
 RESULT 43  
 ACC62153/c  
 ID ACC62153 standard; DNA; 20 BP.  
 XX ACC62153;  
 XX  
 XX DT 20-JUN-2003 (first entry)  
 XX  
 XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 42.  
 XX  
 XX KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 XX OS Synthetic.  
 XX  
 XX PN WO2003011887-A2.  
 XX PD 13-FEB-2003.  
 XX  
 XX PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 XX PR 01-AUG-2001; 2001US-00920033.  
 XX PR 30-APR-2002; 2002US-00135985.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX PI Crooke RM, Graham MJ;  
 XX  
 XX DR WPI; 2003-268105/26.  
 XX  
 XX PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 XX PS Example 15; Page 96; 160pp; English.  
 XX  
 XX CC The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which

CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention  
 CC  
 CC SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3841 TTCAGAGGCATCTGGGAGT 3860  
 Db 20 TTCAGAGGCATCTGGGAGT 1  
 RESULT 44  
 ACC62154/c  
 ID ACC62154 standard; DNA; 20 BP.  
 XX ACC62154;  
 XX  
 XX DT 20-JUN-2003 (first entry)  
 XX  
 XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 43.  
 XX  
 XX KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 XX OS Synthetic.  
 XX  
 XX PN WO2003011887-A2.  
 XX PD 13-FEB-2003.  
 XX  
 XX PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 XX PR 01-AUG-2001; 2001US-00920033.  
 XX PR 30-APR-2002; 2002US-00135985.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX PI Crooke RM, Graham MJ;  
 XX  
 XX DR WPI; 2003-268105/26.  
 XX  
 XX PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 XX PS Example 15; Page 96; 160pp; English.  
 XX  
 XX CC

CC The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically type 2 diabetes), obesity, atherosclerosis or  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4281 CTTCCGGCTCGTTACCAT 4300  
 Db |||||

RESULT 45  
 ACC62136/c  
 ID ACC62136 standard; DNA; 20 BP.  
 XX AC ACC62136;  
 XX  
 DT 20-JUN-2003 (first entry)  
 DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 25.  
 XX  
 KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2003-268105/26.  
 DR  
 XX  
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 PT especially for preventing or treating atherosclerosis, hyperlipidaemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or

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XX Example 15; Page 96; 160pp; English.

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 CC the expression of a nucleic acid molecule encoding ApoB; or which  
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 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipemic, antiarteriosclerotic, antidiabetic,  
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 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically type 2 diabetes), obesity, atherosclerosis or  
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 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 716 GGGCAATGTGGCAACAGAA 735  
 Db |||||

RESULT 46  
 ACC62141/c  
 ID ACC62141 standard; DNA; 20 BP.  
 XX AC ACC62141;  
 XX  
 DT 20-JUN-2003 (first entry)  
 DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 30.  
 XX  
 KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2003-268105/26.  
 DR

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XX New antisense oligonucleotides for modulating apolipoprotein B,
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CC the expression of a nucleic acid molecule encoding ApoB; or which
CC specifically hybridises with at least an 8-nucleotide portion of an
CC active site on a nucleic acid molecule encoding ApoB. A compound of the
CC invention has antilipemic, antiarteriosclerotic, antidiabetic,
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CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
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CC (particularly plasma or serum glucose levels) in a human or diabetic
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CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
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CC preventing or delaying the onset of a disease or condition associated
CC with ApoB, or the onset of an increase in glucose levels in the animal or
CC human. The present sequence is used in the exemplification of the
CC invention.
XX SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1361 CACCTACTGCTGGCCCTGA 1380
Db 20 CACCTACTGCTGGCCCTGA 1
RESULT 47
ACC62145/c
ID ACC62145 standard; DNA; 20 BP.
XX AC ACC62145;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 34.
XX KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
KW anorectic; cardiovascular; gene therapy; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
KW glucose; antisense oligonucleotide; ss.
XX OS Synthetic.
XX PN W02003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.
XX PR 30-APR-2002; 2002US-00135985.
XX PR 15-MAY-2002; 2002US-00147196.
XX PA (ISIS-) ISIS PHARM INC.

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XX Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
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CC (particularly plasma or serum glucose levels) in a human or diabetic
CC animal, or for modulating serum cholesterol levels, lipoprotein levels
CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
CC particularly in a human. The antisense compound is also useful for
CC preventing or delaying the onset of a disease or condition associated
CC with ApoB, or the onset of an increase in glucose levels in the animal or
CC human. The present sequence is used in the exemplification of the
CC invention.
XX SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2331 GTGGACCACCTTTGGCTATAC 2350
Db 20 GTGGACCACCTTTGGCTATAC 1
RESULT 48
ACC62156/c
ID ACC62156 standard; DNA; 20 BP.
XX AC ACC62156;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 45.
XX KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
KW anorectic; cardiovascular; gene therapy; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
KW glucose; antisense oligonucleotide; ss.
XX OS Synthetic.
XX PN W02003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.

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PR 30-APR-2002; 2002US-00135985.
PR 15-MAY-2002; 2002US-00147196.
PA (ISIS-) ISIS PHARM INC.
PI Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
XX
XX New antisense oligonucleotides for modulating apolipoprotein B,
XX especially for preventing or treating atherosclerosis, hyperlipidemia or
XX diabetes, or for modulating glucose, cholesterol, lipoprotein or
XX triglyceride levels.
XX
XX Example 15; Page 96; 160pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleotides in
XX length that is targeted to a nucleic acid molecule encoding
XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX the expression of a nucleic acid molecule encoding ApoB; or which
XX specifically hybridises with at least an 8-nucleotide portion of an
XX active site on a nucleic acid molecule encoding ApoB. A compound of the
XX invention has antilipaeamic, antiarteriosclerotic, antidiabetic,
XX anorectic, and cardiovascular activity. The compound may have a use in
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XX condition involving abnormal lipid metabolism, a condition involving
XX abnormal cholesterol metabolism, atherosclerosis, or a condition
XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
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XX (particularly plasma or serum glucose levels) in a human or diabetic
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XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 4641 TGTCAGAGGATCCTTAACAC 4660
DB 20 TGTCAGAGGATCCTTAACAC 1
| | | | | | | | | | | | | | | |
RESULT 49
ACC62130/c
ID ACC62130 standard; DNA; 20 BP.
XX
XX ACC62130;
XX
XX 20-JUN-2003 (first entry)
XX
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 19.
XX
XX alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;
XX anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; antisense oligonucleotide; ss.
XX
XX Synthetic.
XX
XX WO2003011887-A2.
XX
XX 13-FEB-2003.
XX

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XX 30-JUL-2002; 2002WO-US024247.
XX
XX 01-AUG-2001; 2001US-00920033.
XX 30-APR-2002; 2002US-00135985.
XX 15-MAY-2002; 2002US-00147196.
XX
XX (ISIS-) ISIS PHARM INC.
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XX Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
XX
XX New antisense oligonucleotides for modulating apolipoprotein B,
XX especially for preventing or treating atherosclerosis, hyperlipidemia or
XX diabetes, or for modulating glucose, cholesterol, lipoprotein or
XX triglyceride levels.
XX
XX Example 15; Page 96; 160pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleotides in
XX length that is targeted to a nucleic acid molecule encoding
XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX the expression of a nucleic acid molecule encoding ApoB; or which
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XX active site on a nucleic acid molecule encoding ApoB. A compound of the
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XX condition involving abnormal lipid metabolism, a condition involving
XX abnormal cholesterol metabolism, atherosclerosis, or a condition
XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
XX cardiovascular disease). The new compound or the antisense
XX oligonucleotide is also useful for modulating glucose levels
XX (particularly plasma or serum glucose levels) in a human or diabetic
XX animal, or for modulating serum cholesterol levels, lipoprotein levels
XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 0 A; 10 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 71 CAGGGCCGCGAGCCGAGGC 90
DB 20 CAGGGCCGCGAGCCGAGGC 1
| | | | | | | | | | | | | | | |
RESULT 50
ACC62134/c
ID ACC62134 standard; DNA; 20 BP.
XX
XX ACC62134;
XX
XX 20-JUN-2003 (first entry)
XX
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 23.
XX
XX alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;
XX anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; antisense oligonucleotide; ss.
XX
XX Synthetic.
XX

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XX PN WO2003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.
XX PR 30-APR-2002; 2002US-00135985.
XX PR 15-MAY-2002; 2002US-00147196.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2003-268105/26.
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XX CC invention
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 321 CCTGGACTGCTGATTCAAG 340
Db 20 CCTGGACTGCTGATTCAAG 1
RESULT 51
ACC62144/c
ID ACC62144 standard; DNA; 20 BP.
XX AC ACC62144;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 33.
XX KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
XX KW anorectic; cardiovascular; gene therapy; lipid metabolism;
XX KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 37.

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KW KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX KW glucose; antisense oligonucleotide; ss.
XX OS Synthetic.
XX PN WO2003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.
XX PR 30-APR-2002; 2002US-00135985.
XX PR 15-MAY-2002; 2002US-00147196.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2003-268105/26.
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XX CC (particularly plasma or serum glucose levels) in a human or diabetic
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XX CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
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XX CC preventing or delaying the onset of a disease or condition associated
XX CC with ApoB, or the onset of an increase in glucose levels in the animal or
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XX CC invention
XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1791 GGAGATAAGCGACTGGCTGC 1810
Db 20 GGAGATAAGCGACTGGCTGC 1
RESULT 52
ACC62148/c
ID ACC62148 standard; DNA; 20 BP.
XX AC ACC62148;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 37.

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XX alipoprotein B; ApoB; antilipaeic; antiarteriosclerotic; antidiabetic;
KW anorectic; cardiovascular; gene therapy; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
KW glucose; antisense oligonucleotide; ss.
XX Synthetic.
XX WO2003011887-A2.
XX 13-FEB-2003.
XX 30-JUL-2002; 2002WO-US024247.
XX 01-AUG-2001; 2001US-00920033.
XX 30-APR-2002; 2002US-00135985.
XX 15-MAY-2002; 2002US-00147196.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
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CC invention
XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2811 GCTAGGAGTGGGTCCAGAT 2830
| | | | | | | | | | | | | | | | | |
DB 20 GCTAGGAGTGGGTCCAGAT 1
| | | | | | | | | | | | | | | | | |
RESULT 53
ACC62143/c
ID ACC62143 standard; DNA; 20 BP.
XX
AC ACC62143;

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XX 20-JUN-2003 (first entry)
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 32.
XX alipoprotein B; ApoB; antilipaeic; antiarteriosclerotic; antidiabetic;
KW anorectic; cardiovascular; gene therapy; lipid metabolism;
KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
KW glucose; antisense oligonucleotide; ss.
XX Synthetic.
XX WO2003011887-A2.
XX 13-FEB-2003.
XX 30-JUL-2002; 2002WO-US024247.
XX 01-AUG-2001; 2001US-00920033.
XX 30-APR-2002; 2002US-00135985.
XX 15-MAY-2002; 2002US-00147196.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
XX New antisense oligonucleotides for modulating apolipoprotein B,
PT especially for preventing or treating atherosclerosis, hyperlipidaemia or
PT diabetes, or for modulating glucose, cholesterol, lipoprotein or
PT triglyceride levels.
XX Example 15; Page 96; 160pp; English.
XX The invention relates to a novel compound that is 8-50 nucleotides in
CC length that is targeted to a nucleic acid molecule encoding
CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits
CC the expression of a nucleic acid molecule encoding ApoB; or which
CC specifically hybridises with at least an 8-nucleotide portion of an
CC active site on a nucleic acid molecule encoding ApoB. A compound of the
CC invention has antilipaeic, antiarteriosclerotic, antidiabetic,
CC anorectic, and cardiovascular activity. The compound may have a use in
CC gene therapy. The antisense oligonucleotide is useful for treating an
CC animal having a disease or conditions associated with ApoB, e.g. a
CC condition involving abnormal lipid metabolism, a condition involving
CC abnormal cholesterol metabolism, atherosclerosis, or a condition
CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
CC (specifically type 2 diabetes), obesity, atherosclerosis or
CC cardiovascular disease). The new compound or the antisense
CC oligonucleotide is also useful for modulating glucose levels
CC (particularly plasma or serum glucose levels) in a human or diabetic
CC animal, or for modulating serum cholesterol levels, lipoprotein levels
CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
CC particularly in a human. The antisense compound is also useful for
CC preventing or delaying the onset of a disease or condition associated
CC with ApoB, or the onset of an increase in glucose levels in the animal or
CC human. The present sequence is used in the exemplification of the
CC invention
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1611 ATGGGCCCAACCATGGAGCA 1630
| | | | | | | | | | | | | | | | | |
DB 20 ATGGGCCCAACCATGGAGCA 1
| | | | | | | | | | | | | | | | | |
RESULT 54

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ACC62147/c
ID ACC62147 standard; DNA; 20 BP.
XX
XX ACC62147;
XX
XX
XX
XX
XX 20-JUN-2003 (first entry)
XX
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 36.
XX
XX alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
XX anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; antisense oligonucleotide; ss.
XX
XX Synthetic.
XX
XX WO2003011887-A2.
XX
XX 13-FEB-2003.
XX
XX 30-JUL-2002; 2002WO-US024247.
XX
XX 01-AUG-2001; 2001US-00920033.
XX
XX 30-APR-2002; 2002US-00135985.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2003-268105/26.
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XX especially for preventing or treating atherosclerosis, hyperlipidemia or
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XX the expression of a nucleic acid molecule encoding ApoB; or which
XX specifically hybridises with at least an 8-nucleotide portion of an
XX active site on a nucleic acid molecule encoding ApoB. A compound of the
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XX animal having a disease or conditions associated with ApoB, e.g. a
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XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
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XX (particularly plasma or serum glucose levels) in a human or diabetic
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XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
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XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2573 GGTCTATCAGGAGGCTCAA 2592
|||||

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Db 20 GGTCTATCAGGAGGCTCAA 1
RESULT 55
ACC62150/c
ID ACC62150 standard; DNA; 20 BP.
XX
XX ACC62150;
XX
XX 20-JUN-2003 (first entry)
XX
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 39.
XX
XX alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
XX anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; antisense oligonucleotide; ss.
XX
XX Synthetic.
XX
XX WO2003011887-A2.
XX
XX 13-FEB-2003.
XX
XX 30-JUL-2002; 2002WO-US024247.
XX
XX 01-AUG-2001; 2001US-00920033.
XX
XX 30-APR-2002; 2002US-00135985.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2003-268105/26.
XX
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XX especially for preventing or treating atherosclerosis, hyperlipidemia or
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XX
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XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
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XX (particularly plasma or serum glucose levels) in a human or diabetic
XX animal, or for modulating serum cholesterol levels, lipoprotein levels
XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;

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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3367 ATGATGAATCTACTAGGGC 3386  
 |||||  
 Db 20 ATGATGAATCTACTAGGGC 1

RESULT 56  
 ACC62146/c  
 ID ACC62146 standard; DNA; 20 BP.  
 XX  
 AC ACC62146;  
 XX  
 DT 20-JUN-2003 (first entry)  
 XX  
 DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 35.  
 XX  
 KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2003011887-A2.  
 XX  
 PD 13-FEB-2003.  
 XX  
 PF 30-JUL-2002; 2002WO-US024247.  
 XX  
 PR 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2003-268105/26.  
 XX  
 PT New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX  
 PS Example 15; Page 96; 160pp; English.  
 XX  
 CC The invention relates to a novel compound that is 8-50 nucleotides in  
 CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
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 CC condition involving abnormal lipid metabolism, a condition involving  
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 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
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 CC (particularly plasma or serum glucose levels) in a human or diabetic  
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 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
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 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

SQL Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2496 CATGACCTCCAGCTCCTGGG 2515  
 |||||

Db 20 CATGACCTCCAGCTCCTGGG 1

RESULT 57

ACC62128/c

ID ACC62128 standard; DNA; 20 BP.

XX AC ACC62128;

XX DT 20-JUN-2003 (first entry)

XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 17.

XX KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.

XX OS Synthetic.

XX PN WO2003011887-A2.

XX PD 13-FEB-2003.

XX PF 30-JUL-2002; 2002WO-US024247.

XX PR 01-AUG-2001; 2001US-00920033.

XX PR 30-APR-2002; 2002US-00135985.

XX PR 15-MAY-2002; 2002US-00147196.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2003-268105/26.

XX PT New antisense oligonucleotides for modulating apolipoprotein B,  
 XX especially for preventing or treating atherosclerosis, hyperlipidemia or  
 XX diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 XX triglyceride levels.

XX Example 15; Page 96; 160pp; English.

XX The invention relates to a novel compound that is 8-50 nucleotides in  
 XX length that is targeted to a nucleic acid molecule encoding  
 XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
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 XX active site on a nucleic acid molecule encoding ApoB. A compound of the  
 XX invention has antilipaeamic, antiarteriosclerotic, antidiabetic,  
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 XX (particularly plasma or serum glucose levels) in a human or diabetic  
 XX animal, or for modulating serum cholesterol levels, lipoprotein levels  
 XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 XX particularly in a human. The antisense compound is also useful for  
 XX preventing or delaying the onset of a disease or condition associated  
 XX with ApoB, or the onset of an increase in glucose levels in the animal or  
 XX human. The present sequence is used in the exemplification of the  
 XX invention

CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

XX Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATTTCCACCGGACCTGGG 20  
 Db 20 ATTTCCACCGGACCTGGG 1  
 |||||

RESULT 58  
 ACC62152/c  
 ID ACC62152 standard; DNA; 20 BP.  
 XX ACC62152;  
 XX 20-JUN-2003 (first entry)  
 DT Human alipoprotein B antisense oligonucleotide SEQ ID NO: 41.  
 DE  
 XX alipoprotein B; ApoB; antilipaeic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX Synthetic.  
 OS  
 XX WO2003011887-A2.  
 PN  
 XX 13-FEB-2003.  
 PD  
 XX 30-JUL-2002; 2002WO-US024247.  
 PF  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2003-268105/26.  
 DR  
 XX New antisense oligonucleotides for modulating apolipoprotein B,  
 PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX Example 15; Page 96; 160pp; English.

XX The invention relates to a novel compound that is 8-50 nucleotides in  
 XX length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipaeic, antiarteriosclerotic, antidiabetic,  
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 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
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 CC (particularly plasma or serum glucose levels) in a human or diabetic

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 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3791 GACTTTCCGCGACGTGGTT 3810  
 Db 20 GACTTTCCGCGACGTGGTT 1  
 |||||

RESULT 59  
 ACC62132/c  
 ID ACC62132 standard; DNA; 20 BP.  
 XX ACC62132;  
 XX 20-JUN-2003 (first entry)  
 DT Human alipoprotein B antisense oligonucleotide SEQ ID NO: 21.  
 DE  
 XX alipoprotein B; ApoB; antilipaeic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX Synthetic.  
 OS  
 XX WO2003011887-A2.  
 PN  
 XX 13-FEB-2003.  
 PD  
 XX 30-JUL-2002; 2002WO-US024247.  
 PF  
 XX 01-AUG-2001; 2001US-00920033.  
 PR 30-APR-2002; 2002US-00135985.  
 PR 15-MAY-2002; 2002US-00147196.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2003-268105/26.  
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 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
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 CC (particularly plasma or serum glucose levels) in a human or diabetic

CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
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 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
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 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
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 CC invention

XX Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGGCGCTG 170

Db 20 TGCTGGCGCTGCTGGCGCTG 1

RESULT 60

ACC62138/c

ID ACC62138 standard; DNA; 20 BP.

AC ACC62138;

DT 20-JUN-2003 (first entry)

DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 27.

KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.

OS Synthetic.

XX WO2003011887-A2.

PN 13-FEB-2003.

XX 30-JUL-2002; 2002WO-US024247.

XX 01-AUG-2001; 2001US-00920033.

PR 30-APR-2002; 2002US-00135985.

PR 15-MAY-2002; 2002US-00147196.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2003-268105/26.

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 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
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 CC invention

SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 951 AAGTATGGGATGGTAGCACA 970

Db 20 AAGTATGGGATGGTAGCACA 1

RESULT 61

ACC62139/c

ID ACC62139 standard; DNA; 20 BP.

XX AC ACC62139;

DT 20-JUN-2003 (first entry)

DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 28.

KW alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.

OS Synthetic.

XX WO2003011887-A2.

XX 13-FEB-2003.

XX 30-JUL-2002; 2002WO-US024247.

XX 01-AUG-2001; 2001US-00920033.

PR 30-APR-2002; 2002US-00135985.

PR 15-MAY-2002; 2002US-00147196.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2003-268105/26.

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 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
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 CC human. The present sequence is used in the exemplification of the  
 CC invention

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1041 AAGATGGGCGCTCGCATTTGA 1060  
 Db 20 AAGATGGGCGCTCGCATTTGA 1  
 |||||

RESULT 62  
 ACC62131/c  
 ID ACC62131 standard; DNA; 20 BP.  
 XX AC ACC62131;  
 XX DT 20-JUN-2003 (first entry)  
 XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 20.  
 XX KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX WO2003011887-A2.  
 XX PN 13-FEB-2003.  
 XX PD 30-JUL-2002; 2002WO-US024247.  
 XX PF 01-AUG-2001; 2001US-00920033.  
 XX PR 30-APR-2002; 2002US-00135985.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX (ISIS-) ISIS PHARM INC.  
 XX FA Crooke RM, Graham MJ;  
 XX PI WPI; 2003-268105/26.  
 XX DR New antisense oligonucleotides for modulating apolipoprotein B,  
 XX PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.  
 XX Example 15; Page 96; 160pp; English.  
 XX The invention relates to a novel compound that is 8-50 nucleotides in

CC length that is targeted to a nucleic acid molecule encoding  
 CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits  
 CC the expression of a nucleic acid molecule encoding ApoB; or which  
 CC specifically hybridises with at least an 8-nucleotide portion of an  
 CC active site on a nucleic acid molecule encoding ApoB. A compound of the  
 CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,  
 CC anorectic, and cardiovascular activity. The compound may have a use in  
 CC gene therapy. The antisense oligonucleotide is useful for treating an  
 CC animal having a disease or conditions associated with ApoB, e.g. a  
 CC condition involving abnormal lipid metabolism, a condition involving  
 CC abnormal cholesterol metabolism, atherosclerosis, or a condition  
 CC involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes  
 CC (specifically Type 2 diabetes), obesity, atherosclerosis or  
 CC cardiovascular disease). The new compound or the antisense  
 CC oligonucleotide is also useful for modulating glucose levels  
 CC (particularly plasma or serum glucose levels) in a human or diabetic  
 CC animal, or for modulating serum cholesterol levels, lipoprotein levels  
 CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,  
 CC particularly in a human. The antisense compound is also useful for  
 CC preventing or delaying the onset of a disease or condition associated  
 CC with ApoB, or the onset of an increase in glucose levels in the animal or  
 CC human. The present sequence is used in the exemplification of the  
 CC invention

XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 114 CCACCGCAGCTGGCGATGGA 133  
 Db 20 CCACCGCAGCTGGCGATGGA 1  
 |||||

RESULT 63  
 ACC62135/c  
 ID ACC62135 standard; DNA; 20 BP.  
 XX AC ACC62135;  
 XX DT 20-JUN-2003 (first entry)  
 XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 24.  
 XX KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;  
 KW anorectic; cardiovascular; gene therapy; lipid metabolism;  
 KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;  
 KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;  
 KW glucose; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX WO2003011887-A2.  
 XX PN 13-FEB-2003.  
 XX PD 30-JUL-2002; 2002WO-US024247.  
 XX PF 01-AUG-2001; 2001US-00920033.  
 XX PR 30-APR-2002; 2002US-00135985.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX (ISIS-) ISIS PHARM INC.  
 XX FA Crooke RM, Graham MJ;  
 XX PI WPI; 2003-268105/26.  
 XX DR New antisense oligonucleotides for modulating apolipoprotein B,  
 XX PT especially for preventing or treating atherosclerosis, hyperlipidemia or  
 PT diabetes, or for modulating glucose, cholesterol, lipoprotein or  
 PT triglyceride levels.

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XX PS Example 15; Page 96; 160pp; English.
XX CC The invention relates to a novel compound that is 8-50 nucleotides in
XX CC length that is targeted to a nucleic acid molecule encoding
XX CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX CC the expression of a nucleic acid molecule encoding ApoB; or which
XX CC specifically hybridises with at least an 8-nucleotide portion of an
XX CC active site on a nucleic acid molecule encoding ApoB. A compound of the
XX CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,
XX CC anorectic, and cardiovascular activity. The compound may have a use in
XX CC animal having a disease or conditions associated with ApoB, e.g. a
XX CC condition involving abnormal lipid metabolism, a condition involving
XX CC abnormal cholesterol metabolism, atherosclerosis, or a condition
XX CC (specifically Type 2 diabetes), obesity, atherosclerosis, diabetes
XX CC cardiovascular disease). The new compound or the antisense
XX CC oligonucleotide is also useful for modulating glucose levels
XX CC (particularly plasma or serum glucose levels) in a human or diabetic
XX CC animal, or for modulating serum cholesterol levels, lipoprotein levels
XX CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX CC particularly in a human. The antisense compound is also useful for
XX CC preventing or delaying the onset of a disease or condition associated
XX CC with ApoB, or the onset of an increase in glucose levels in the animal or
XX CC human. The present sequence is used in the exemplification of the
XX CC invention
XX SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 451 AGGGCAAGCCTTGCTGAAG 470
DB 20 AGGGCAAGCCTTGCTGAAG 1
|||||
|||||

RESULT 64
ACC62155/c
ID ACC62155 standard; DNA; 20 BP.
XX AC ACC62155;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 44.
XX KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;
XX KW anorectic; cardiovascular; gene therapy; lipid metabolism;
XX KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX KW glucose; antisense oligonucleotide; ss.
XX OS Synthetic.
XX PN WO2003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.
XX PR 30-APR-2002; 2002US-00135985.
XX PR 15-MAY-2002; 2002US-00147196.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2003-268105/26.
XX

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PT New antisense oligonucleotides for modulating apolipoprotein B,
PT especially for preventing or treating atherosclerosis, hyperlipidemia or
PT diabetes, or for modulating glucose, cholesterol, lipoprotein or
PT triglyceride levels.
XX PS Example 15; Page 96; 160pp; English.
XX CC The invention relates to a novel compound that is 8-50 nucleotides in
XX CC length that is targeted to a nucleic acid molecule encoding
XX CC apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX CC the expression of a nucleic acid molecule encoding ApoB; or which
XX CC specifically hybridises with at least an 8-nucleotide portion of an
XX CC active site on a nucleic acid molecule encoding ApoB. A compound of the
XX CC invention has antilipaeamic, antiarteriosclerotic, antidiabetic,
XX CC anorectic, and cardiovascular activity. The compound may have a use in
XX CC animal having a disease or conditions associated with ApoB, e.g. a
XX CC condition involving abnormal lipid metabolism, a condition involving
XX CC abnormal cholesterol metabolism, atherosclerosis, or a condition
XX CC (specifically Type 2 diabetes), obesity, atherosclerosis, diabetes
XX CC cardiovascular disease). The new compound or the antisense
XX CC oligonucleotide is also useful for modulating glucose levels
XX CC (particularly plasma or serum glucose levels) in a human or diabetic
XX CC animal, or for modulating serum cholesterol levels, lipoprotein levels
XX CC (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX CC particularly in a human. The antisense compound is also useful for
XX CC preventing or delaying the onset of a disease or condition associated
XX CC with ApoB, or the onset of an increase in glucose levels in the animal or
XX CC human. The present sequence is used in the exemplification of the
XX CC invention
XX SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4391 ATGTGATGGGTCTCTACGCC 4410
DB 20 ATGTGATGGGTCTCTACGCC 1
|||||
|||||

RESULT 65
ACC62142/c
ID ACC62142 standard; DNA; 20 BP.
XX AC ACC62142;
XX DT 20-JUN-2003 (first entry)
XX DE Human alipoprotein B antisense oligonucleotide SEQ ID NO: 31.
XX KW alipoprotein B; ApoB; antilipaeamic; antiarteriosclerotic; antidiabetic;
XX KW anorectic; cardiovascular; gene therapy; lipid metabolism;
XX KW cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX KW type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX KW glucose; antisense oligonucleotide; ss.
XX OS Synthetic.
XX PN WO2003011887-A2.
XX PD 13-FEB-2003.
XX PF 30-JUL-2002; 2002WO-US024247.
XX PR 01-AUG-2001; 2001US-00920033.
XX PR 30-APR-2002; 2002US-00135985.
XX PR 15-MAY-2002; 2002US-00147196.
XX PA (ISIS-) ISIS PHARM INC.
XX

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PI Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
XX
XX New antisense oligonucleotides for modulating apolipoprotein B,
XX especially for preventing or treating atherosclerosis, hyperlipidemia or
XX diabetes, or for modulating glucose, cholesterol, lipoprotein or
XX triglyceride levels.
XX
XX Example 15; Page 96; 160pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleotides in
XX length that is targeted to a nucleic acid molecule encoding
XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX the expression of a nucleic acid molecule encoding ApoB; or which
XX specifically hybridises with at least an 8-nucleotide portion of an
XX active site on a nucleic acid molecule encoding ApoB. A compound of the
XX invention has antilipemic, antiarteriosclerotic, antidiabetic,
XX anorectic, and cardiovascular activity. The compound may have a use in
XX gene therapy. The antisense oligonucleotide is useful for treating an
XX animal having a disease or conditions associated with ApoB, e.g. a
XX condition involving abnormal lipid metabolism, a condition involving
XX abnormal cholesterol metabolism, atherosclerosis, or a condition
XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
XX cardiovascular disease). The new compound or the antisense
XX oligonucleotide is also useful for modulating glucose levels
XX (particularly plasma or serum glucose levels) in a human or diabetic
XX animal, or for modulating serum cholesterol levels, lipoprotein levels
XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1561 GCATGGGGATGAGATTAC 1580
Db 20 GCATGGGGATGAGATTAC 1
| | | | | | | | | | | | | | | | | | | | | |
RESULT 66
ACC62140/c
ID ACC62140 standard; DNA; 20 BP.
XX
XX ACC62140;
XX
XX 20-JUN-2003 (first entry)
XX
XX Human alipoprotein B antisense oligonucleotide SEQ ID NO: 29.
XX
XX alipoprotein B; ApoB; antilipemic; antiarteriosclerotic; antidiabetic;
XX anorectic; cardiovascular; gene therapy; lipid metabolism;
XX cholesterol metabolism; atherosclerosis; hyperlipidaemia; diabetes;
XX type 2 diabetes; obesity; atherosclerosis; cardiovascular disease;
XX glucose; antisense oligonucleotide; ss.
XX
XX Synthetic.
XX
XX WO2003011887-A2.
XX
XX 13-FEB-2003.
XX
XX 30-JUL-2002; 2002WO-US024247.
XX
XX 01-AUG-2001; 2001US-00920033.
XX
XX 30-APR-2002; 2002US-00135985.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2003-268105/26.
XX
XX New antisense oligonucleotides for modulating apolipoprotein B,
XX especially for preventing or treating atherosclerosis, hyperlipidemia or
XX diabetes, or for modulating glucose, cholesterol, lipoprotein or
XX triglyceride levels.
XX
XX Example 15; Page 96; 160pp; English.
XX
XX The invention relates to a novel compound that is 8-50 nucleotides in
XX length that is targeted to a nucleic acid molecule encoding
XX apolipoprotein B (ApoB), and specifically hybridises with and inhibits
XX the expression of a nucleic acid molecule encoding ApoB; or which
XX specifically hybridises with at least an 8-nucleotide portion of an
XX active site on a nucleic acid molecule encoding ApoB. A compound of the
XX invention has antilipemic, antiarteriosclerotic, antidiabetic,
XX anorectic, and cardiovascular activity. The compound may have a use in
XX gene therapy. The antisense oligonucleotide is useful for treating an
XX animal having a disease or conditions associated with ApoB, e.g. a
XX condition involving abnormal lipid metabolism, a condition involving
XX abnormal cholesterol metabolism, atherosclerosis, or a condition
XX involving an abnormal metabolic condition (e.g. hyperlipidaemia, diabetes
XX (specifically Type 2 diabetes), obesity, atherosclerosis or
XX cardiovascular disease). The new compound or the antisense
XX oligonucleotide is also useful for modulating glucose levels
XX (particularly plasma or serum glucose levels) in a human or diabetic
XX animal, or for modulating serum cholesterol levels, lipoprotein levels
XX (specifically VLDL, HDL or LDL) or serum triglyceride levels,
XX particularly in a human. The antisense compound is also useful for
XX preventing or delaying the onset of a disease or condition associated
XX with ApoB, or the onset of an increase in glucose levels in the animal or
XX human. The present sequence is used in the exemplification of the
XX invention
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1231 CACAGCTGATTGAGGTGTC 1250
Db 20 CACAGCTGATTGAGGTGTC 1
| | | | | | | | | | | | | | | | | | | | | |
RESULT 67
ADH18055/c
ID ADH18055 standard; DNA; 20 BP.
XX
XX ADH18055;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 44.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiac; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX

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PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Example 15; SEQ ID NO 44; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridizes with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4391 ATGTGATGGTCTCTACGCC 4410
DB 20 ATGTGATGGTCTCTACGCC 1
RESULT 68
ADH18137/c
ID ADH18137 standard; DNA; 20 BP.
XX
AC ADH18137;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 126.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.

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XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Example 29; SEQ ID NO 126; 405pp; English.
XX
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridizes with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 359 CTGCAAGGTTGAGCTGGAGG 378
DB 20 CTGCAAGGTTGAGCTGGAGG 1
RESULT 69
ADH18203/c
ID ADH18203 standard; DNA; 20 BP.
XX
AC ADH18203;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 192.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 192; 405pp; English.
XX
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridizes with and inhibits the expression of human apolipoprotein B.

```

CC The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX  
XX  
SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 849 AGCAGCCAGTCCTGTCTAGTA 868  
DB 20 AGCAGCCAGTCCTGTCTAGTA 1

RESULT 70  
ADH18208/c  
ID ADH18208 standard; DNA; 20 BP.  
XX  
AC ADH18208;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 197.  
XX  
KW apolipoprotein B; ApOB; antiarteriosclerotic; cardiant; antidiabetic; anorectic; lipid; cholesterol metabolism; atherosclerosis; diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy; antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE; human; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2004-022840/02.  
XX  
PT New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 197; 405pp; English.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2004-022840/02.  
XX  
PT New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 197; 405pp; English.  
XX  
CC The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApOB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

SQ Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1390 CCTCAGCACAGCAGCTGCGA 1409  
DB 20 CCTCAGCACAGCAGCTGCGA 1

RESULT 71  
ADH18225/c  
ID ADH18225 standard; DNA; 20 BP.  
XX  
AC ADH18225;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 214.  
XX  
KW apolipoprotein B; ApOB; antiarteriosclerotic; cardiant; antidiabetic; anorectic; lipid; cholesterol metabolism; atherosclerosis; diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy; antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE; human; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2004-022840/02.  
XX  
PT New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 214; 405pp; English.  
XX  
CC The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApOB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4039 GCAAAATCCTCCAGAGATCTA 4058  
DB 20 GCAAAATCCTCCAGAGATCTA 1



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RESULT 72
ADH18263/c
ID ADH18263 standard; DNA; 20 BP.
XX
AC ADH18263;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 252.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PT 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 252; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 TCGGTTGCTGCGCGTGAGGA 55
DB 20 TCGGTTGCTGCGCGTGAGGA 1

RESULT 73
ADH18305/c
ID ADH18305 standard; DNA; 20 BP.
XX
AC ADH18305;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 294.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PT 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 294; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 TCGGTTGCTGCGCGTGAGGA 55
DB 20 TCGGTTGCTGCGCGTGAGGA 1

RESULT 74
ADH18535
ID ADH18535 standard; DNA; 20 BP.
XX
AC ADH18535;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 524.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX

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PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 DR  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 524; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2179 CAGCTGACCTCATCGAGATT 2198  
 Db 1 CAGCTGACCTCATCGAGATT 20  
 RESULT 75  
 ADH18567  
 ID ADH18567 standard; DNA; 20 BP.  
 XX  
 AC ADH18567;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 556.  
 XX  
 DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003097662-A1.  
 XX  
 XX 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 XX  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 XX 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 524; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2179 CAGCTGACCTCATCGAGATT 2198  
 Db 1 CAGCTGACCTCATCGAGATT 20  
 RESULT 75  
 ADH18567  
 ID ADH18567 standard; DNA; 20 BP.  
 XX  
 AC ADH18567;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 556.  
 XX  
 DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003097662-A1.  
 XX  
 XX 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 XX  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 XX 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 524; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ

PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 556; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 449 TGAGGGCAAAAGCCTTGCTGA 468  
 Db 1 TGAGGGCAAAAGCCTTGCTGA 20  
 RESULT 76  
 ADH18578  
 ID ADH18578 standard; DNA; 20 BP.  
 XX  
 AC ADH18578;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 567.  
 XX  
 DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003097662-A1.  
 XX  
 XX 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 XX  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 XX 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 567; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ



KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX Claim 1; SEQ ID NO 619; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 20; DB 1; Length 20;  
 XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 36 TCGGTTGCTGCGCTGAGGA 55  
 Db 1 TCGGTTGCTGCGCTGAGGA 20  
 RESULT 80  
 ADH18631  
 ID ADH18631 standard; DNA; 20 BP.  
 XX AC ADH18631;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 620.  
 XX APolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX Claim 1; SEQ ID NO 620; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 20; DB 1; Length 20;  
 XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 37 CGGTTGCTGCGCTGAGGAG 56  
 Db 1 CGGTTGCTGCGCTGAGGAG 20  
 RESULT 81  
 ADH18666  
 ID ADH18666 standard; DNA; 20 BP.  
 XX AC ADH18666;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 655.  
 XX APolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX Claim 1; SEQ ID NO 655; 405pp; English.





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XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PS 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 15; SEQ ID NO 23; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 321 CCTGGGACTCTGATTCAAG 340
XX DB |||||
XX 20 CCTGGGACTCTGATTCAAG 1
XX RESULT 87
XX ADH18051/c
XX ID ADH18051 standard; DNA; 20 BP.
XX AC ADH18051;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 40.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX CC New antisense compound, useful for preparing a composition for treating
XX CC abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX CC 2, obesity, hyperlipidemia or cardiovascular disease.
XX CC Example 15; SEQ ID NO 23; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 321 CCTGGGACTCTGATTCAAG 340
XX DB |||||
XX 20 CCTGGGACTCTGATTCAAG 1
XX RESULT 87
XX ADH18051/c
XX ID ADH18051 standard; DNA; 20 BP.
XX AC ADH18051;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 40.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX CC New antisense compound, useful for preparing a composition for treating
XX CC abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX CC 2, obesity, hyperlipidemia or cardiovascular disease.
XX CC Example 15; SEQ ID NO 23; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 3611 TTCCAAGAGGCTGCATGCC 3630
XX DB |||||
XX 20 TTCCAAGAGGCTGCATGCC 1
XX RESULT 88
XX ADH18053/c
XX ID ADH18053 standard; DNA; 20 BP.
XX AC ADH18053;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 42.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX CC New antisense compound, useful for preparing a composition for treating
XX CC abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX CC 2, obesity, hyperlipidemia or cardiovascular disease.
XX CC Example 15; SEQ ID NO 42; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 3611 TTCCAAGAGGCTGCATGCC 3630
XX DB |||||
XX 20 TTCCAAGAGGCTGCATGCC 1

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CC cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX  
SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3841 TTCAGAGGCATCTGGGAGT 3860  
Db 20 TTCAGAGGCATCTGGGAGT 1

RESULT 89  
ADH18158/C  
ID ADH18158 standard; DNA; 20 BP.  
XX  
AC ADH18158;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 147.  
XX  
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
KW human; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
XX  
FR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2004-022840/02.  
XX  
PT New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 147; 405pp; English.  
XX  
SQ The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX  
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1829 GAGTCCTTCACAGCAGATA 1848  
Db 20 GAGTCCTTCACAGCAGATA 1

RESULT 91  
ADH18223/C  
ID ADH18223 standard; DNA; 20 BP.

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3100 CCTACTATCCGCTGACCGGG 3119  
Db 20 CCTACTATCCGCTGACCGGG 1

RESULT 90  
ADH18213/C  
ID ADH18213 standard; DNA; 20 BP.  
XX  
AC ADH18213;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 202.  
XX  
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
KW human; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
XX  
FR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
DR WPI; 2004-022840/02.  
XX  
PT New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 202; 405pp; English.  
XX  
SQ The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX  
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1829 GAGTCCTTCACAGCAGATA 1848  
Db 20 GAGTCCTTCACAGCAGATA 1

RESULT 91  
ADH18223/C  
ID ADH18223 standard; DNA; 20 BP.



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XX AC ADH18223;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 212.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 212; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3488 CAAGGGTGTTATTTCCATAC 3507
DB 20 CAAGGGTGTTATTTCCATAC 1

RESULT 92
ADH18226/c
ID ADH18226 standard; DNA; 20 BP.
XX AC ADH18226;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 215.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.

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KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 215; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4180 CTCCTCCGGGTGTTCTAGAC 4199
DB 20 CTCCTCCGGGTGTTCTAGAC 1

RESULT 93
ADH18311/c
ID ADH18311 standard; DNA; 20 BP.
XX AC ADH18311;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 300.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.

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XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 300; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3260 GACTGAGGCTACCATGACAT 3279
Db 20 GACTGAGGCTACCATGACAT 1
RESULT 94
ADH18315/c
ID ADH18315 standard; DNA; 20 BP.
XX
XX ADH18315;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 304.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 521; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 1 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3268 CTACCATGACATTCAAATAT 3287
Db 20 CTACCATGACATTCAAATAT 1
RESULT 95
ADH18532
ID ADH18532 standard; DNA; 20 BP.
XX
XX ADH18532;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 521.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 521; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 1 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3268 CTACCATGACATTCAAATAT 3287
Db 20 CTACCATGACATTCAAATAT 1

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CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 869 CACACTGGACGCTAAGAGGA 888  
 DB 1 CACACTGGACGCTAAGAGGA 20  
 |||||

## RESULT 96

ADH18581  
 ID ADH18581 standard; DNA; 20 BP.

XX ADH18581;

XX 11-MAR-2004 (first entry)

DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 570.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

OS Homo sapiens.

XX Crooke RM, Graham MJ;  
 PN WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

DR WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 570; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1829 GAGTCCTTCACAGCAGATA 1848

DB 1 GAGTCCTTCACAGCAGATA 20  
 |||||

## RESULT 97

ADH18635  
 ID ADH18635 standard; DNA; 20 BP.

XX ADH18635;

XX 11-MAR-2004 (first entry)

XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 624.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

OS Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 624; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 3 A; 8 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 120 CAGCTGGCGATGACCCGCC 139

DB 1 CAGCTGGCGATGACCCGCC 20  
 |||||

## RESULT 98

ADH18672  
 ID ADH18672 standard; DNA; 20 BP.

XX ADH18672;

XX 11-MAR-2004 (first entry)

XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 661.

```

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisenese inhibition target; human; ds.
XX Homo sapiens.
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 661; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human ApoB antisense
XX inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3250 GTGCGAGCAGCTGAGGCT 3269
XX | | | | | | | | | | | | | | | |
XX 1 GTGCGAGCAGCTGAGGCT 20
XX
XX RESULT 99
XX ADH18675
XX ID ADH18675 standard; DNA; 20 BP.
XX AC ADH18675;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 664.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisenese inhibition target; human; ds.
XX Homo sapiens.
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.

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XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 664; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human ApoB antisense
XX inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3256 AGCAGACTGAGGCTACCATG 3275
XX | | | | | | | | | | | | | | | |
XX 1 AGCAGACTGAGGCTACCATG 20
XX
XX RESULT 100
XX ADH18674
XX ID ADH18674 standard; DNA; 20 BP.
XX AC ADH18674;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 663.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisenese inhibition target; human; ds.
XX Homo sapiens.
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.

```

XX PS Claim 1; SEQ ID NO 663; 405pp; English.

XX CC The invention relates to a novel antisense compound targeted to a nucleic

CC acid molecule encoding human apolipoprotein B (ApoB) which specifically

CC hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic,

CC cardiant, antidiabetic and anorectic activities and may be useful for

CC preparing a composition for treating abnormal lipid or cholesterol

CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or

CC cardiovascular disease. Furthermore, the compound has gene therapy

CC applications. The current sequence is that of the human ApoB antisense

CC inhibition target DNA of the invention.

XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3254 GAAGCAGACTGAGGCTACCA 3273

Db 1 GAAGCAGACTGAGGCTACCA 20

RESULT 101

ADH18677

ID ADH18677 standard; DNA; 20 BP.

XX AC ADH18677;

XX DT 11-MAR-2004 (first entry)

XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 666.

XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;

XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;

XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;

XX KW antisense inhibition target; human; ds.

XX OS Homo sapiens.

XX WO2003097662-A1.

XX DT 27-NOV-2003.

XX PF 15-MAY-2003; 2003WO-US015493.

XX PR 15-MAY-2002; 2002US-00147196.

XX PR 13-NOV-2002; 2002US-0426324P.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2004-022840/02.

XX PT New antisense compound, useful for preparing a composition for treating

PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type

PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 666; 405pp; English.

XX CC The invention relates to a novel antisense compound targeted to a nucleic

CC acid molecule encoding human apolipoprotein B (ApoB) which specifically

CC hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic,

CC cardiant, antidiabetic and anorectic activities and may be useful for

CC preparing a composition for treating abnormal lipid or cholesterol

CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or

CC cardiovascular disease. Furthermore, the compound has gene therapy

CC applications. The current sequence is that of the human ApoB antisense

CC inhibition target DNA of the invention.

XX SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3260 GACTGAGGCTACCATGACAT 3279

Db 1 GACTGAGGCTACCATGACAT 20

RESULT 102

ADH18229/c

ID ADH18229 standard; DNA; 20 BP.

XX AC ADH18229;

XX DT 11-MAR-2004 (first entry)

XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 218.

XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;

XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;

XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;

XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;

XX KW human; ss.

XX OS Homo sapiens.

XX WO2003097662-A1.

XX DT 27-NOV-2003.

XX PF 15-MAY-2003; 2003WO-US015493.

XX PR 15-MAY-2002; 2002US-00147196.

XX PR 13-NOV-2002; 2002US-0426324P.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2004-022840/02.

XX PT New antisense compound, useful for preparing a composition for treating

PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type

PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 218; 405pp; English.

XX CC The invention relates to a novel antisense compound targeted to a nucleic

CC acid molecule encoding human apolipoprotein B (ApoB) which specifically

CC hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic,

CC cardiant, antidiabetic and anorectic activities and may be useful for

CC preparing a composition for treating abnormal lipid or cholesterol

CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or

CC cardiovascular disease. Furthermore, the compound has gene therapy

CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-

CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a

CC phosphorothioate backbone throughout and in which all cytidine residues

CC are 5-methylcytidines.

XX SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4660 CTGGCCGGCTCAATGGAGAG 4679

Db 20 CTGGCCGGCTCAATGGAGAG 1

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RESULT 103
ADH18303/c
ID ADH18303 standard; DNA; 20 BP.
XX
XX ADH18303;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 292.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR
XX
XX 13-NOV-2002; 2002US-0426324P.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Crooke RM, Graham MJ;
PI
XX
XX WPI; 2004-022840/02.
DR
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
PT
XX
XX Claim 1; SEQ ID NO 292; 405pp; English.
PS
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3244 CAGAAGTGCAGACACT 3263
Db 20 CAGAAGTGCAGACACT 1
|||||
|||||

RESULT 104
ADH18565
ID ADH18565 standard; DNA; 20 BP.
XX
XX ADH18565;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX

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DE
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 554.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR
XX
XX 13-NOV-2002; 2002US-0426324P.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Crooke RM, Graham MJ;
PI
XX
XX WPI; 2004-022840/02.
DR
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
PT
XX
XX Claim 1; SEQ ID NO 554; 405pp; English.
PS
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 269 GCACCTCCGGAAGTACACAT 288
Db 1 GCACCTCCGGAAGTACACAT 20
|||||
|||||

RESULT 105
ADH18576
ID ADH18576 standard; DNA; 20 BP.
XX
XX ADH18576;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 565.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX
XX 27-NOV-2003.
PD
XX
XX

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PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 565; 405pp; English.
PS
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1390 CCTCAGCACAGCAGTGGCA 1409
DB 1 CCTCAGCACAGCAGTGGCA 20
RESULT 106
ADH18585
ID ADH18585 standard; DNA; 20 BP.
XX
AC ADH18585;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 574.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 577; 405pp; English.
PS
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2729 CAACATGCGAGCTGAACCTGG 2748
DB 1 CAACATGCGAGCTGAACCTGG 20
RESULT 107
ADH18588
ID ADH18588 standard; DNA; 20 BP.
XX
AC ADH18588;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 577.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 577; 405pp; English.
PS
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX

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```
CC inhibition target DNA of the invention.
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3118 GGGACACAGATTAGAGCTG 3137
      |||||
      1 GGGACACAGATTAGAGCTG 20

RESULT 108
ADH18142/c
ID ADH18142 standard; DNA; 20 BP.
XX
XX
AC ADH18142;
XX
DT 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 131.
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
OS
XX WO2003097662-A1.
FN
XX 27-NOV-2003.
PD
XX 15-MAY-2003; 2003WO-US015493.
PF
XX 15-MAY-2002; 2002US-00147196.
PR
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
PI
XX WPI; 2004-022840/02.
DR
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 131; 405pp; English.
PS
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 699 ACCGTCACAGAGGAGGG 718
      |||||
```

```
Db 20 ACCGTCACAGAGGAGGG 1

RESULT 109
ADH18148/c
ID ADH18148 standard; DNA; 20 BP.
XX
XX
AC ADH18148;
XX
DT 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 137.
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
OS
XX WO2003097662-A1.
FN
XX 27-NOV-2003.
PD
XX 15-MAY-2003; 2003WO-US015493.
PF
XX 15-MAY-2002; 2002US-00147196.
PR
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
PI
XX WPI; 2004-022840/02.
DR
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Example 29; SEQ ID NO 137; 405pp; English.
PS
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1419 AACATGCGGAGGATCAGCG 1438
      |||||
      20 AACATGCGGAGGATCAGCG 1

Db

RESULT 110
ADH18161/c
ID ADH18161 standard; DNA; 20 BP.
XX
XX
AC ADH18161;
XX
DT 11-MAR-2004 (first entry)
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XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 150.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX XX
XX PN WO2003097662-A1.
XX XX
XX PD 27-NOV-2003.
XX XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX XX
XX PR 15-MAY-2002; 2002US-00147196.
XX XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Crooke RM, Graham MJ;
XX XX
XX DR WPI; 2004-022840/02.
XX XX
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX XX
XX PS Claim 1; SEQ ID NO 150; 405pp; English.
XX XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX XX
XX SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4089 CTCACCTTCAGTCTGTGGG 4108
DB 20 CTCACCTTCAGTCTGTGGG 1

RESULT 111
ADH18200/c
ID ADH18200 standard; DNA; 20 BP.
XX
XX AC ADH18200;
XX XX
XX DT 11-MAR-2004 (first entry)
XX XX
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 189.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.

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XX PN WO2003097662-A1.
XX XX
XX PD 27-NOV-2003.
XX XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX XX
XX PR 15-MAY-2002; 2002US-00147196.
XX XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Crooke RM, Graham MJ;
XX XX
XX DR WPI; 2004-022840/02.
XX XX
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX XX
XX PS Claim 1; SEQ ID NO 189; 405pp; English.
XX XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX XX
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 529 CCATTCAGAGGAGGAGCAG 548
DB 20 CCATTCAGAGGAGGAGCAG 1

RESULT 112
ADH18221/c
ID ADH18221 standard; DNA; 20 BP.
XX
XX AC ADH18221;
XX XX
XX DT 11-MAR-2004 (first entry)
XX XX
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 210.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX XX
XX PN WO2003097662-A1.
XX XX
XX PD 27-NOV-2003.
XX XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX XX
XX PR 15-MAY-2002; 2002US-00147196.
XX XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX XX
XX OS Homo sapiens.

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PA (ISIS-) ISIS PHARM INC.
PI Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 210; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 3189 GAGTCCAGAGAGGACAG 3208
Db 20 GAGTCCAGAGAGGACAG 1
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

RESULT 113
ADH18209/c
ID ADH18209 standard; DNA; 20 BP.
XX
XX ADH18209;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 198.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 207; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1589 GATTCTCGGGTCAATGGAA 1608
Db 20 GATTCTCGGGTCAATGGAA 1
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

RESULT 114
ADH18218/c
ID ADH18218 standard; DNA; 20 BP.
XX
XX ADH18218;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 207.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 207; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1589 GATTCTCGGGTCAATGGAA 1608
Db 20 GATTCTCGGGTCAATGGAA 1
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

```

CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2949 ACATTACATTGCTCTCTAC 2968  
 DB 20 ACATTACATTGCTCTCTAC 1

RESULT 115  
 ADH18222/c  
 ID ADH18222 standard; DNA; 20 BP.  
 XX AC ADH18222;  
 XX 11-MAR-2004 (first entry)  
 XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 211.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.  
 OS WO2003097662-A1.  
 XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.  
 XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 211; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3289 ATCGGCAGATGACCTTG 3308  
 DB 20 ATCGGCAGATGACCTTG 1

RESULT 116  
 ADH18309/c  
 ID ADH18309 standard; DNA; 20 BP.

XX AC ADH18309;  
 XX 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 298.  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.  
 OS WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

PR 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 298; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3256 AGCAGACTGAGGCTTACCATG 3275  
 DB 20 AGCAGACTGAGGCTTACCATG 1

RESULT 117  
 ADH18536  
 ID ADH18536 standard; DNA; 20 BP.

XX

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AC ADH18536;
DT 11-MAR-2004 (first entry)
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 525.
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX Homo sapiens.
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 525; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2299 GTCAGTTCCTGATGGTGTC 2318
Db 1 GTCAGTTCCTGATGGTGTC 20
|||||
RESULT 118
ADH18584
ID ADH18584 standard; DNA; 20 BP.
XX ADH18584;
XX 11-MAR-2004 (first entry)
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 573.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX Homo sapiens.
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2649 GGAGCTGGATTACAGTTGCA 2668
Db 1 GGAGCTGGATTACAGTTGCA 20
|||||
RESULT 119
ADH18586
ID ADH18586 standard; DNA; 20 BP.
XX ADH18586;
XX 11-MAR-2004 (first entry)
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 575.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 573; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2649 GGAGCTGGATTACAGTTGCA 2668
Db 1 GGAGCTGGATTACAGTTGCA 20
|||||

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PN WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 573; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2649 GGAGCTGGATTACAGTTGCA 2668
Db 1 GGAGCTGGATTACAGTTGCA 20
|||||
RESULT 119
ADH18586
ID ADH18586 standard; DNA; 20 BP.
XX ADH18586;
XX 11-MAR-2004 (first entry)
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 575.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX

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DR WPI; 2004-022840/02.  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 575; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2949 ACATTACATTGGTCTCTAC 2968  
 DB 1 ACATTACATTGGTCTCTAC 20  
 RESULT 120  
 ADH18031/c  
 ID ADH18031 standard; DNA; 20 BP.  
 XX  
 AC ADH18031;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 20.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Example 15; SEQ ID NO 20; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 114 CCACGGCAGCTGGCGATGGA 133  
 DB 20 CCACGGCAGCTGGCGATGGA 1  
 RESULT 121  
 ADH18032/c  
 ID ADH18032 standard; DNA; 20 BP.  
 XX  
 AC ADH18032;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 21.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Example 15; SEQ ID NO 21; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 151 TGCTGGGCTGCTGGCGCTG 170
    |||||
Db 20 TGCTGGGCTGCTGGCGCTG 1

RESULT 122
ADH18036/C
ID ADH18036 standard; DNA; 20 BP.
AC ADH18036;
XX
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 25.
XX
XX apolipoprotein B; ApOB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
XX OS
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Example 15; SEQ ID NO 25; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApOB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 716 GGGCAATGTGGCAACAGAAA 735
    |||||
Db 20 GGGCAATGTGGCAACAGAAA 1

RESULT 124
ADH18159/C
ID ADH18159 standard; DNA; 20 BP.
XX
XX ADH18159;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 148.
XX

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RESULT 123
ADH18044/C
ID ADH18044 standard; DNA; 20 BP.
XX
XX ADH18044;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 33.
XX
XX apolipoprotein B; ApOB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
XX OS
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Example 15; SEQ ID NO 33; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApOB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1791 GGAGATAAGCGACTGGCTGC 1810
    |||||
Db 20 GGAGATAAGCGACTGGCTGC 1

RESULT 124
ADH18159/C
ID ADH18159 standard; DNA; 20 BP.
XX
XX ADH18159;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApOB DNA 1 - SEQ ID 148.
XX

```

KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 148; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3449 GGGCCACCTAAGTTGTGACA 3468  
 Db 20 GGGCCACCTAAGTTGTGACA 1  
 RESULT 125  
 ADH18207/C  
 ID ADH18207 standard; DNA; 20 BP.  
 XX  
 AC ADH18207;  
 XX  
 DT 11-MAR-2004 (first entry)  
 DE  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 196.  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 148; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3449 GGGCCACCTAAGTTGTGACA 3468  
 Db 20 GGGCCACCTAAGTTGTGACA 1  
 RESULT 125  
 ADH18207/C  
 ID ADH18207 standard; DNA; 20 BP.  
 XX  
 AC ADH18207;  
 XX  
 DT 11-MAR-2004 (first entry)  
 DE  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 196.  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 196; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1349 GATAGATGTGTCACCTACC 1368  
 Db 20 GATAGATGTGTCACCTACC 1  
 RESULT 126  
 ADH18220/C  
 ID ADH18220 standard; DNA; 20 BP.  
 XX  
 AC ADH18220;  
 XX  
 DT 11-MAR-2004 (first entry)  
 DE  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 209.  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI

XX WPI; 2004-022840/02.  
 DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 209; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3118 GGGACACGATTAGAGCTG 3137  
 DB 20 GGGACACGATTAGAGCTG 1  
 RESULT 127  
 ADH18259/c  
 ID ADH18259 standard; DNA; 20 BP.  
 XX  
 AC ADH18259;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 248.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PF New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 248; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic

CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3 TCCACCGGGACCTGCGGG 22  
 DB 20 TCCACCGGGACCTGCGGG 1  
 RESULT 128  
 ADH18307/c  
 ID ADH18307 standard; DNA; 20 BP.  
 XX  
 AC ADH18307;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 296.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PF New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 296; 405pp; English.  
 XX  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues



```

CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3252 GCGAAGCAGACTGAGGCTAC 3271
DB 20 GCGAAGCAGACTGAGGCTAC 1

RESULT 129
ADH18539
ID ADH18539 standard; DNA; 20 BP.
XX
XX ADH18539;
AC
XX 11-MAR-2004 (first entry)
DT
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 528.
DE
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
XX WO2003097662-A1.
FN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX 15-MAY-2002; 2002US-00147196.
PR
XX 13-NOV-2002; 2002US-0426324P.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
PI
XX WPI; 2004-022840/02.
DR
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 528; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3100 CCTACTATCCGCTGACCGGG 3119
DB 1 CCTACTATCCGCTGACCGGG 20

RESULT 130
ADH18569
ID ADH18569 standard; DNA; 20 BP.
XX
XX ADH18569;
AC
XX 11-MAR-2004 (first entry)
DT
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 558.
DE
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
XX WO2003097662-A1.
FN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX 15-MAY-2002; 2002US-00147196.
PR
XX 13-NOV-2002; 2002US-0426324P.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
PI
XX WPI; 2004-022840/02.
DR
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 558; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 709 CGAGGAAGGGCAATGTGGCA 728
DB 1 CGAGGAAGGGCAATGTGGCA 20

RESULT 131
ADH18593
ID ADH18593 standard; DNA; 20 BP.
XX
XX ADH18593;
AC
XX 11-MAR-2004 (first entry)
DT
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 582.
DE
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW

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KW antisense inhibition target; human; ds.
OS Homo sapiens.
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 582; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human ApoB antisense
XX inhibition target DNA of the invention.
XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4039 GCAAAATCCTCCAGAGATCTA 4058
Db 1 GCAAAATCCTCCAGAGATCTA 20

RESULT 132
ADH18595
XX ADH18595 standard; DNA; 20 BP.
XX AC ADH18595;
XX 11-MAR-2004 (first entry)
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 584.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 584.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 584; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human ApoB antisense
XX inhibition target DNA of the invention.
XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4299 ATGAAGGCTGACTCTGTGGT 4318
Db 1 ATGAAGGCTGACTCTGTGGT 20

RESULT 133
ADH18665
XX ADH18665 standard; DNA; 20 BP.
XX AC ADH18665;
XX 11-MAR-2004 (first entry)
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 654.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 654; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic

```

CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3236 AACTCAAGCAGAGGTGCGA 3255  
 Db 1 AACTCAAGCAGAGGTGCGA 20  
 |||||

RESULT 134

ADH18671  
 ID ADH18671 standard; DNA; 20 BP.

XX  
 AC ADH18671;

XX  
 DT 11-MAR-2004 (first entry)

XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 660.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 660; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3248 AGGTCCGAAGCAGACTGAGG 3267

Db 1 AGGTCCGAAGCAGACTGAGG 20  
 |||||

RESULT 135

ADH18227/c

ID ADH18227 standard; DNA; 20 BP.

XX  
 AC ADH18227;

XX 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 216.  
 DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 XX anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.

OS WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 216; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4299 ATGAAGGCTGACTCTGTGGT 4318

Db 20 ATGAAGGCTGACTCTGTGGT 1  
 |||||

RESULT 136

ADH18265/c



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PF 15-MAY-2003; 2003WO-US015493.
XX
XX
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 297; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3254 GAAGCAGACTGAGGCTACCA 3273
DB 20 GAAGCAGACTGAGGCTACCA 1
XX
XX RESULT 139
XX ADH18312/C
XX ID ADH18312 standard; DNA; 20 BP.
XX
XX AC ADH18312;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 301.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 514; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3262 CTGAGGCTACCATGACATTC 3281
DB 20 CTGAGGCTACCATGACATTC 1
XX
XX RESULT 140
XX ADH18525/C
XX ID ADH18525 standard; DNA; 20 BP.
XX
XX AC ADH18525;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA - SEQ ID 514.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 514; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.

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CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) capmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3254 GAAGCAGACTGAGGTACCA 3273  
 Db 20 GAAGCAGACTGAGGTACCA 1

## RESULT 141

ADH18534  
 ID ADH18534 standard; DNA; 20 BP.

XX  
 AC ADH18534;

XX  
 DT 11-MAR-2004 (first entry)

XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 523.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX Homo sapiens.

XX WO2003097662-A1.

XX  
 PD 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 523; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1859 TGTCCAAATTCACCATGGG 1878

Db 1 TGTCCAAATTCACCATGGG 20

## RESULT 142

ADH18568  
 ID ADH18568 standard; DNA; 20 BP.

XX  
 AC ADH18568;

XX  
 DT 11-MAR-2004 (first entry)

XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 557.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX Homo sapiens.

XX WO2003097662-A1.

XX  
 PD 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 557; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 529 CCATTCCAGAGGAGGACGAG 548

Db 1 CCATTCCAGAGGAGGACGAG 20

## RESULT 143

ADH18571  
 ID ADH18571 standard; DNA; 20 BP.

XX  
 AC ADH18571;



XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 578; 405pp; English.  
XX  
CC The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 3189 GAGTCCAGAGAGGACAG 3208  
Db 1 GAGTCCAGAGAGGACAG 20  
|||||  
RESULT 146  
ADH18592  
ID ADH18592 standard; DNA; 20 BP.  
XX  
AC ADH18592;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 581.  
XX  
DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense inhibition target; human; ds.  
XX  
OS Homo sapiens.  
XX  
XX WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
XX  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
XX WPI; 2004-022840/02.  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 581; 405pp; English.  
XX  
CC The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol

CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 3579 GACTCATCTGCTACAGCTTA 3598  
Db 1 GACTCATCTGCTACAGCTTA 20  
|||||  
RESULT 147  
ADH18632  
ID ADH18632 standard; DNA; 20 BP.  
XX  
AC ADH18632;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 621.  
XX  
DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense inhibition target; human; ds.  
XX  
OS Homo sapiens.  
XX  
XX WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
PF 15-MAY-2003; 2003WO-US015493.  
XX  
PR 15-MAY-2002; 2002US-00147196.  
XX  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke RM, Graham MJ;  
XX  
XX WPI; 2004-022840/02.  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
XX  
PS Claim 1; SEQ ID NO 621; 405pp; English.  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
XX hybridises with and inhibits the expression of human apolipoprotein B.  
XX The compound of the invention demonstrates antiarteriosclerotic,  
XX cardiant, antidiabetic and anorectic activities and may be useful for  
XX preparing a composition for treating abnormal lipid or cholesterol  
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
XX cardiovascular disease. Furthermore, the compound has gene therapy  
XX applications. The current sequence is that of the human ApoB antisense  
XX inhibition target DNA of the invention.  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 39 GTTCTCCCGCTGAGGAGCC 58  
|||||



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Db      1 GTTGCTGCCCTGAGGAGCC 20
RESULT 148
ADH18633
ID ADH18633 standard; DNA; 20 BP.
XX
AC ADH18633;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 622.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Example 15; SEQ ID NO 24; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 451 AGGCGAAGCCTTCTGTAAG 470
DB 20 AGGCGAAGCCTTCTGTAAG 1
|||||
RESULT 150
ADH18037/C
ID ADH18037 standard; DNA; 20 BP.
XX
AC ADH18037;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 26.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
Db      1 GTTGCTGCCCTGAGGAGCC 20
RESULT 149
ADH18035/C
ID ADH18035 standard; DNA; 20 BP.
XX
AC ADH18035;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 24.
XX
QY 43 CTGCGCTGAGGAGCCGCC 62
DB 1 CTGCGCTGAGGAGCCGCC 20
|||||
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 43 CTGCGCTGAGGAGCCGCC 62
DB 1 CTGCGCTGAGGAGCCGCC 20
|||||
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 451 AGGCGAAGCCTTCTGTAAG 470
DB 20 AGGCGAAGCCTTCTGTAAG 1
|||||

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XX 27-NOV-2003.
XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX
XX PR 15-MAY-2002; 2002US-00147196.
XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke RM, Graham MJ;
XX
XX DR WPI; 2004-022840/02.
XX
XX PT New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX PS Example 15; SEQ ID NO 26; 405pp; English.
XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 911 CAAGGAGCAACACCTCTTCC 930
XX ||||||||||||||||
XX 20 CAAGGAGCAACACCTCTTCC 1
XX
XX RESULT 151
XX ADH18050/C
XX ID ADH18050 standard; DNA; 20 BP.
XX
XX AC ADH18050;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 39.
XX
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003097662-A1.
XX
XX PD 27-NOV-2003.
XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX
XX PR 15-MAY-2002; 2002US-00147196.
XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke RM, Graham MJ;
XX

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XX WPI; 2004-022840/02.
XX
XX PT New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX PS Example 15; SEQ ID NO 39; 405pp; English.
XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX SQ Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 3367 ATGATGAATCTACTGAGGCG 3386
XX ||||||||||||||||
XX 20 ATGATGAATCTACTGAGGCG 1
XX
XX Db
XX
XX RESULT 152
XX ADH18136/C
XX ID ADH18136 standard; DNA; 20 BP.
XX
XX AC ADH18136;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 125.
XX
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003097662-A1.
XX
XX PD 27-NOV-2003.
XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX
XX PR 15-MAY-2002; 2002US-00147196.
XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX PT New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX PS Example 29; SEQ ID NO 125; 405pp; English.
XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic

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CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 299 GCGTGAGGTTCCAGTGGAG 318  
 DB 20 GCGTGAGGTTCCAGTGGAG 1  
 |||||

RESULT 153  
 ADH18205/C  
 ID ADH18205 standard; DNA; 20 BP.  
 XX  
 AC ADH18205;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 194.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.  
 OS  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

PA Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 194; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues

CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 2 A; 3 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1059 GAGAGCAGCAATCCACATC 1078  
 DB 20 GAGAGCAGCAATCCACATC 1  
 |||||

RESULT 154  
 ADH18214/C  
 ID ADH18214 standard; DNA; 20 BP.

XX  
 AC ADH18214;

XX 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 203.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.

OS  
 PN WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 203; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCAATATCTTGAATCAG 1938  
 |||||

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Db      20 TGCCAAATATCTTGAACTCAG 1
RESULT 155
ADH18030/c
ID      ADH18030 standard; DNA; 20 BP.
XX      AC
XX      ADH18030;
AC
DT      11-MAR-2004 (first entry)
XX
DE      2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 19.
XX
XX      apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX      anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX      antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX      human; ss.
XX      Homo sapiens.
OS
DT      2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 19.
XX
DE      apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX      anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX      antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX      human; ss.
XX      Homo sapiens.
OS
XX      WO2003097662-A1.
FN
XX      27-NOV-2003.
PD
XX      15-MAY-2003; 2003WO-US015493.
PF
XX      15-MAY-2002; 2002US-00147196.
PR
XX      13-NOV-2002; 2002US-0426324P.
XX
XX      (ISIS-) ISIS PHARM INC.
PA
XX      Crooke RM, Graham MJ;
PI
XX      WPI; 2004-022840/02.
DR
XX      New antisense compound, useful for preparing a composition for treating
PT      abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
PT      2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX      Example 15; SEQ ID NO 19; 405pp; English.
PS
XX      The invention relates to a novel antisense compound targeted to a nucleic
CC      acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC      hybridises with and inhibits the expression of human apolipoprotein B.
CC      The compound of the invention demonstrates antiarteriosclerotic,
CC      cardiant, antidiabetic and anorectic activities and may be useful for
CC      preparing a composition for treating abnormal lipid or cholesterol
CC      metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
CC      cardiovascular disease. Furthermore, the compound has gene therapy
CC      applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC      MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC      phosphorothioate backbone throughout and in which all cytidine residues
CC      are 5-methylcytidines.
XX
SQ      Sequence 20 BP; 0 A; 10 C; 7 G; 3 T; 0 U; 0 Other;
      Query Match      0.1%; Score 20; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      71 CAGGCGCGGAGCGGAGGC 90
      |||||
      20 CAGGCGCGGAGCGGAGGC 1

RESULT 156
ADH18041/c
ID      ADH18041 standard; DNA; 20 BP.
XX
XX      AC
XX      ADH18041;
AC
XX      11-MAR-2004 (first entry)
DT
DE      2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 32.
XX
XX      apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX      anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX      antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX      human; ss.
XX      Homo sapiens.
OS

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XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 15; SEQ ID NO 32; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1611 ATGGGCCAAACCATGGAGCA 1630
DB 20 ATGGGCCAAACCATGGAGCA 1
RESULT 158
ADH18048/c
ID ADH18048 standard; DNA; 20 BP.
XX AC ADH18048;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 37.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 15; SEQ ID NO 32; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1611 ATGGGCCAAACCATGGAGCA 1630
DB 20 ATGGGCCAAACCATGGAGCA 1
RESULT 158
ADH18048/c
ID ADH18048 standard; DNA; 20 BP.
XX AC ADH18048;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 37.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 15; SEQ ID NO 37; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2811 GCTAGGAGTGGGTCCAGAT 2830
DB 20 GCTAGGAGTGGGTCCAGAT 1
RESULT 159
ADH18056/c
ID ADH18056 standard; DNA; 20 BP.
XX AC ADH18056;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 45.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 15; SEQ ID NO 37; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2811 GCTAGGAGTGGGTCCAGAT 2830
DB 20 GCTAGGAGTGGGTCCAGAT 1

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PS Example 15; SEQ ID NO 45; 405pp; English.
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4641 TGTGAGAGGGATCCTAACAC 4660
Db 20 TGTGAGAGGGATCCTAACAC 1
RESULT 160
ADH18140/c
ID ADH18140 standard; DNA; 20 BP.
XX
AC ADH18140;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 129.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
WPI; 2004-022840/02.
XX
PF New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 129; 405pp; English.
XX
PI Crooke RM, Graham MJ;
XX
WPI; 2004-022840/02.
XX
PF New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 129; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4641 TGTGAGAGGGATCCTAACAC 4660
Db 20 TGTGAGAGGGATCCTAACAC 1
RESULT 161
ADH18212/c
ID ADH18212 standard; DNA; 20 BP.
XX
AC ADH18212;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 201.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
WPI; 2004-022840/02.
XX
PF New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 201; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1749 CAGGAGGTTCTTCTTCAGAC 1768
DB      20 CAGGAGGTTCTTCTTCAGAC 1

RESULT 162
ADH18230/c
ID      ADH18230 standard; DNA; 20 BP.
XX
AC      ADH18230;
XX
DT      11-MAR-2004 (first entry)
XX
DE      2'-MOE gapmer antisense oligo targeted to human Apob DNA 1 - SEQ ID 219.
XX
KW      apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW      anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW      antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW      human; ss.
XX
OS      Homo sapiens.
XX
PN      WO2003097662-A1.
XX
PD      27-NOV-2003.
XX
PF      15-MAY-2003; 2003WO-US015493.
XX
PR      15-MAY-2002; 2002US-00147196.
PR      13-NOV-2002; 2002US-0426324P.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke RM, Graham MJ;
XX
DR      WPI; 2004-022840/02.
XX
PT      New antisense compound, useful for preparing a composition for treating
PT      abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT      2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS      Claim 1; SEQ ID NO 219; 405pp; English.
XX
CC      The invention relates to a novel antisense compound targeted to a nucleic
CC      acid molecule encoding human apolipoprotein B (Apob) which specifically
CC      hybridises with and inhibits the expression of human apolipoprotein B.
CC      The compound of the invention demonstrates antiarteriosclerotic.
CC      cardiant, antidiabetic and anorectic activities and may be useful for
CC      preparing a composition for treating abnormal lipid or cholesterol
CC      metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC      cardiovascular disease. Furthermore, the compound has gene therapy
CC      applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC      MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC      phosphorothioate backbone throughout and in which all cytidine residues
CC      are 5-methylcytidines.
XX
SQ      Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4919 GTCGCGTTCTGAATATCAGG 4938
DB      20 GTCGCGTTCTGAATATCAGG 1

RESULT 163
ADH18537
ID      ADH18537 standard; DNA; 20 BP.
XX

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AC      ADH18537;
XX
DT      11-MAR-2004 (first entry)
XX
DE      Human apolipoprotein B antisense inhibition target DNA - SEQ ID 526.
XX
KW      apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW      anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW      antisense inhibition target; human; ds.
XX
OS      Homo sapiens.
XX
PN      WO2003097662-A1.
XX
PD      27-NOV-2003.
XX
PF      15-MAY-2003; 2003WO-US015493.
XX
PR      15-MAY-2002; 2002US-00147196.
PR      13-NOV-2002; 2002US-0426324P.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke RM, Graham MJ;
XX
DR      WPI; 2004-022840/02.
XX
PT      New antisense compound, useful for preparing a composition for treating
PT      abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT      2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS      Claim 1; SEQ ID NO 526; 405pp; English.
XX
CC      The invention relates to a novel antisense compound targeted to a nucleic
CC      acid molecule encoding human apolipoprotein B (Apob) which specifically
CC      hybridises with and inhibits the expression of human apolipoprotein B.
CC      The compound of the invention demonstrates antiarteriosclerotic.
CC      cardiant, antidiabetic and anorectic activities and may be useful for
CC      preparing a composition for treating abnormal lipid or cholesterol
CC      metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC      cardiovascular disease. Furthermore, the compound has gene therapy
CC      applications. The current sequence is that of the human Apob antisense
CC      inhibition target DNA of the invention.
XX
SQ      Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2518 AGCTGCTTCTGATGGGTGCC 2537
DB      1 AGCTGCTTCTGATGGGTGCC 20

RESULT 164
ADH18564
ID      ADH18564 standard; DNA; 20 BP.
XX
AC      ADH18564;
XX
DT      11-MAR-2004 (first entry)
XX
DE      Human apolipoprotein B antisense inhibition target DNA - SEQ ID 553.
XX
KW      apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW      anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW      diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW      antisense inhibition target; human; ds.
XX
OS      Homo sapiens.
XX

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PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 553; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 229 ATGTCAGCCTGGTCTGTCCA 248
Db 1 ATGTCAGCCTGGTCTGTCCA 20
|||||
RESULT 165
ADH18566
ID ADH18566 standard; DNA; 20 BP.
XX
XX AC ADH18566;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 555.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX DT 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 555.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX DT 27-NOV-2003.
XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX
XX PR 15-MAY-2002; 2002US-00147196.
XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX

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DR WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 555; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 389 CTGCAGCTTCATCTGAAGA 408
Db 1 CTGCAGCTTCATCTGAAGA 20
|||||
RESULT 166
ADH18574
ID ADH18574 standard; DNA; 20 BP.
XX
XX AC ADH18574;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 563.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX DT 27-NOV-2003.
XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX
XX PR 15-MAY-2002; 2002US-00147196.
XX
XX PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 563; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
SQ

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XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
PS Example 15; SEQ ID NO 31; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1561 GCACCTGGGGATGAGATTAC 1580
Db 20 GCACCTGGGGATGAGATTAC 1

RESULT 170
ADH18046/c
ID ADH18046 standard; DNA; 20 BP.
XX
AC ADH18046;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 35.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.

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XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Example 15; SEQ ID NO 35; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2496 CATGACCTCCAGCTCCTGGG 2515
Db 20 CATGACCTCCAGCTCCTGGG 1

RESULT 171
ADH18141/c
ID ADH18141 standard; DNA; 20 BP.
XX
XX ADH18141;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 130.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX
XX
XX

```

PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 130; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 669 ACCGTGATGGAACCTGCTC 688  
 DB 20 ACCGTGATGGAACCTGCTC 1  
 RESULT 172  
 ADH18152/c  
 ID ADH18152 standard; DNA; 20 BP.  
 XX  
 XX ADH18152;  
 XX  
 XX 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 141.  
 XX  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 141; 405pp; English.

CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2179 CAGCTGACCTCATCGAGATT 2198  
 DB 20 CAGCTGACCTCATCGAGATT 1  
 RESULT 173  
 ADH18154/c  
 ID ADH18154 standard; DNA; 20 BP.  
 XX  
 XX ADH18154;  
 XX  
 XX 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 143.  
 XX  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 143; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a



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DT 11-MAR-2004 (first entry)
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 255.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
OS Homo sapiens.
XX WO2003097662-A1.
PN 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 255; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
SQ Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 43 CTGCCGCTGAGGAGCCGCC 62
Db 20 CTGCCGCTGAGGAGCCGCC 1

RESULT 177
ADH18268/c
ID ADH18268 standard; DNA; 20 BP.
XX ADH18268;
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 257.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
OS Homo sapiens.
XX WO2003097662-A1.
PN 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 255; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
SQ Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 43 CTGCCGCTGAGGAGCCGCC 62
Db 20 CTGCCGCTGAGGAGCCGCC 1

RESULT 178
ADH18301/c
ID ADH18301 standard; DNA; 20 BP.
XX ADH18301;
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 290.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
OS Homo sapiens.
XX WO2003097662-A1.
PN 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 257; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 120 CAGCTGGCGATGGACCCGCC 139
Db 20 CAGCTGGCGATGGACCCGCC 1

RESULT 178
ADH18301/c
ID ADH18301 standard; DNA; 20 BP.
XX ADH18301;
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 290.
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
OS Homo sapiens.
XX WO2003097662-A1.
PN 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 257; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 120 CAGCTGGCGATGGACCCGCC 139
Db 20 CAGCTGGCGATGGACCCGCC 1

```

XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 290; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX SQ Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3240 CAAGCAGAAAGTGGCAAGCA 3259  
 DB 20 CAAGCAGAAAGTGGCAAGCA 1  
 RESULT 179  
 ADH18304/c  
 ID ADH18304 standard; DNA; 20 BP.  
 XX AC ADH18304;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 293.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 293; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3246 GAAGGTCCGAAGCAGACTGA 3265  
 DB 20 GAAGGTCCGAAGCAGACTGA 1  
 RESULT 180  
 ADH18313/c  
 ID ADH18313 standard; DNA; 20 BP.  
 XX AC ADH18313;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 302.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 302; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or

CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3264 GAGGCTACCATGACATTCAA 3283  
 DB 20 GAGGCTACCATGACATTCAA 1

## RESULT 181

ADH18582  
 ID ADH18582 standard; DNA; 20 BP.  
 AC  
 XX ADH18582;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 571.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.

XX  
 XX WO2003097662-A1.  
 XX  
 XX 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 XX  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 XX 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 571; 405pp; English.

CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCAATATCTTGAACCTCAG 1938

DB 1 TGCCAATATCTTGAACCTCAG 20

## RESULT 182

ADH18590  
 ID ADH18590 standard; DNA; 20 BP.  
 AC  
 XX ADH18590;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 579.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.

XX  
 XX WO2003097662-A1.  
 XX  
 XX 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 XX  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke RM, Graham MJ;  
 XX  
 XX WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 XX 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 579; 405pp; English.

CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3289 ATCGGACAGATATGACCTTG 3308

DB 1 ATCGGACAGATATGACCTTG 20

## RESULT 183

ADH18598  
 ID ADH18598 standard; DNA; 20 BP.  
 AC  
 XX ADH18598;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 587.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX Claim 1; SEQ ID NO 587; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 4919 GCTGCGTTCTGAATATCAGG 4938  
 Db 1 GCTGCGTTCTGAATATCAGG 20  
 RESULT 184  
 ADH18662  
 ID ADH18662 standard; DNA; 20 BP.  
 XX ADH18662;  
 XX 11-MAR-2004 (first entry)  
 XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 651.  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX Claim 1; SEQ ID NO 651; 405pp; English.  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 3230 GTTGTAACTCAGCAGAAG 3249  
 Db 1 GTTGTAACTCAGCAGAAG 20  
 RESULT 185  
 ADH18663  
 ID ADH18663 standard; DNA; 20 BP.  
 XX ADH18663;  
 XX 11-MAR-2004 (first entry)  
 XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 652.  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX Homo sapiens.  
 XX WO2003097662-A1.  
 XX 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.





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ADH18029/c
ID  ADH18029 standard; DNA; 20 BP.
XX  AC
XX  ADH18029;
XX  DT
XX  11-MAR-2004 (first entry)
XX  DE
XX  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 18.
XX  KW
XX  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX  anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX  diabetes Type 2; obesity; hyperlipidaemia; atherosclerosis;
XX  KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX  KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX  KW  human; ss.
XX  OS
XX  Homo sapiens.
XX  PN  WO2003097662-A1.
XX  PD  27-NOV-2003.
XX  PF
XX  15-MAY-2003; 2003WO-US015493.
XX  PR  15-MAY-2002; 2002US-00147196.
XX  PR  13-NOV-2002; 2002US-0426324P.
XX  PA  (ISIS-) ISIS PHARM INC.
XX  PI  Crooke RM, Graham MJ;
XX  PI  WPI; 2004-022840/02.
XX  DR
XX  New antisense compound, useful for preparing a composition for treating
XX  PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX  PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX  PS
XX  Example 15; SEQ ID NO 18; 405pp; English.
XX  CC
XX  The invention relates to a novel antisense compound targeted to a nucleic
XX  CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX  CC  hybridises with and inhibits the expression of human apolipoprotein B.
XX  CC  The compound of the invention demonstrates antiarteriosclerotic,
XX  CC  cardiant, antidiabetic and anorectic activities and may be useful for
XX  CC  preparing a composition for treating abnormal lipid or cholesterol
XX  CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX  CC  cardiovascular disease. Furthermore, the compound has gene therapy
XX  CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX  CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX  CC  phosphorothioate backbone throughout and in which all cytidine residues
XX  CC  are 5-methylcytidines.
XX  SQ  Sequence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  21 GGCTGAGTGCCTCTCGGT 40
    |||||
DB  20 GGCTGAGTGCCTCTCGGT 1

RESULT 189
ADH18047/c
ID  ADH18047 standard; DNA; 20 BP.
XX  AC
XX  ADH18047;
XX  DT
XX  11-MAR-2004 (first entry)
XX  DE
XX  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 36.
XX  KW
XX  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX  anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX  KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX  KW  human; ss.
XX  OS
XX  Homo sapiens.
XX  PN  WO2003097662-A1.
XX  PD  27-NOV-2003.
XX  PF
XX  15-MAY-2003; 2003WO-US015493.
XX  PR  15-MAY-2002; 2002US-00147196.
XX  PR  13-NOV-2002; 2002US-0426324P.
XX  PA  (ISIS-) ISIS PHARM INC.
XX  PI  Crooke RM, Graham MJ;
XX  PI  WPI; 2004-022840/02.
XX  DR
XX  New antisense compound, useful for preparing a composition for treating
XX  PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX  PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX  PS
XX  Example 15; SEQ ID NO 18; 405pp; English.
XX  CC
XX  The invention relates to a novel antisense compound targeted to a nucleic
XX  CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX  CC  hybridises with and inhibits the expression of human apolipoprotein B.
XX  CC  The compound of the invention demonstrates antiarteriosclerotic,
XX  CC  cardiant, antidiabetic and anorectic activities and may be useful for
XX  CC  preparing a composition for treating abnormal lipid or cholesterol
XX  CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX  CC  cardiovascular disease. Furthermore, the compound has gene therapy
XX  CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX  CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX  CC  phosphorothioate backbone throughout and in which all cytidine residues
XX  CC  are 5-methylcytidines.
XX  SQ  Sequence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  21 GGCTGAGTGCCTCTCGGT 40
    |||||
DB  20 GGCTGAGTGCCTCTCGGT 1

RESULT 190
ADH18157/c
ID  ADH18157 standard; DNA; 20 BP.
XX  AC
XX  ADH18157;
XX  DT
XX  11-MAR-2004 (first entry)
XX  DE
XX  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 146.
XX  KW
XX  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX  KW  anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX  KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX  KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX  KW  human; ss.
XX  OS
XX  Homo sapiens.
XX  PN  WO2003097662-A1.
XX  PD  27-NOV-2003.
XX  PF
XX  15-MAY-2003; 2003WO-US015493.
XX  PR  15-MAY-2002; 2002US-00147196.
XX  PR  13-NOV-2002; 2002US-0426324P.
XX  PA  (ISIS-) ISIS PHARM INC.
XX  PI  Crooke RM, Graham MJ;
XX  PI  WPI; 2004-022840/02.
XX  DR
XX  New antisense compound, useful for preparing a composition for treating
XX  PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX  PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX  PS
XX  Example 15; SEQ ID NO 36; 405pp; English.
XX  CC
XX  The invention relates to a novel antisense compound targeted to a nucleic
XX  CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX  CC  hybridises with and inhibits the expression of human apolipoprotein B.
XX  CC  The compound of the invention demonstrates antiarteriosclerotic,
XX  CC  cardiant, antidiabetic and anorectic activities and may be useful for
XX  CC  preparing a composition for treating abnormal lipid or cholesterol
XX  CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX  CC  cardiovascular disease. Furthermore, the compound has gene therapy
XX  CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX  CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX  CC  phosphorothioate backbone throughout and in which all cytidine residues
XX  CC  are 5-methylcytidines.
XX  SQ  Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2573 GGTCATCAGGAGGCTCAA 2592
    |||||
DB  20 GGTCATCAGGAGGCTCAA 1

RESULT 190
ADH18157/c
ID  ADH18157 standard; DNA; 20 BP.
XX  AC
XX  ADH18157;
XX  DT
XX  11-MAR-2004 (first entry)
XX  DE
XX  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 146.
XX  KW
XX  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX  KW  anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX  KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX  KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX  KW  human; ss.
XX  OS
XX  Homo sapiens.
XX  PN  WO2003097662-A1.
XX  PD  27-NOV-2003.
XX  PF
XX  15-MAY-2003; 2003WO-US015493.
XX  PR  15-MAY-2002; 2002US-00147196.
XX  PR  13-NOV-2002; 2002US-0426324P.
XX  PA  (ISIS-) ISIS PHARM INC.
XX  PI  Crooke RM, Graham MJ;
XX  PI  WPI; 2004-022840/02.
XX  DR
XX  New antisense compound, useful for preparing a composition for treating
XX  PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX  PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX  PS
XX  Example 15; SEQ ID NO 36; 405pp; English.
XX  CC
XX  The invention relates to a novel antisense compound targeted to a nucleic
XX  CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX  CC  hybridises with and inhibits the expression of human apolipoprotein B.
XX  CC  The compound of the invention demonstrates antiarteriosclerotic,
XX  CC  cardiant, antidiabetic and anorectic activities and may be useful for
XX  CC  preparing a composition for treating abnormal lipid or cholesterol
XX  CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX  CC  cardiovascular disease. Furthermore, the compound has gene therapy
XX  CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX  CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX  CC  phosphorothioate backbone throughout and in which all cytidine residues
XX  CC  are 5-methylcytidines.
XX  SQ  Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2573 GGTCATCAGGAGGCTCAA 2592
    |||||
DB  20 GGTCATCAGGAGGCTCAA 1

```

XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 146; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2919 AGACCAGTCAAGCTGCTCAG 2938  
 DB 20 AGACCAGTCAAGCTGCTCAG 1  
 RESULT 191  
 ADH18215/c  
 ID ADH18215 standard; DNA; 20 BP.  
 XX  
 XX ADH18215;  
 AC  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 204.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 XX anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 299; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2919 AGACCAGTCAAGCTGCTCAG 2938  
 DB 20 AGACCAGTCAAGCTGCTCAG 1

DR WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 204; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2189 CATCGAGATTGGCTTGAAG 2208  
 DB 20 CATCGAGATTGGCTTGAAG 1  
 RESULT 192  
 ADH18310/c  
 ID ADH18310 standard; DNA; 20 BP.  
 XX  
 XX ADH18310;  
 AC  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 299.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2003097662-A1.  
 PN  
 XX 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke RM, Graham MJ;  
 PI  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 PT  
 XX Claim 1; SEQ ID NO 299; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2189 CATCGAGATTGGCTTGAAG 2208  
 DB 20 CATCGAGATTGGCTTGAAG 1

CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3258 CAGACTGAGGCTACCATGAC 3277  
 Db 20 CAGACTGAGGCTACCATGAC 1  
 RESULT 193  
 ADH18542  
 ID ADH18542 standard; DNA; 20 BP.  
 AC ADH18542;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 531.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 531; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1349 GATAGATGTCGTCACCTACC 1368  
 Db 1 GATAGATGTCGTCACCTACC 20  
 RESULT 195  
 ADH18580  
 ID ADH18580 standard; DNA; 20 BP.  
 XX

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4089 CTCACACTTCAAGTCGTGGG 4108  
 Db 1 CTCACACTTCAAGTCGTGGG 20  
 RESULT 194  
 ADH18575  
 ID ADH18575 standard; DNA; 20 BP.  
 AC ADH18575;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 564.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 564; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1349 GATAGATGTCGTCACCTACC 1368  
 Db 1 GATAGATGTCGTCACCTACC 20  
 RESULT 195  
 ADH18580  
 ID ADH18580 standard; DNA; 20 BP.  
 XX



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DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 586; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic.
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4660 CTGGCCGCTCAATGGAGAG 4679
Db 1 CTGGCCGCTCAATGGAGAG 20
RESULT 198
ADH18626
ID ADH18626 standard; DNA; 20 BP.
XX
AC ADH18626;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 615.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PT 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PT 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 615; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic.
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4660 CTGGCCGCTCAATGGAGAG 4679
Db 1 CTGGCCGCTCAATGGAGAG 20

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CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3 TCCACCGCGGACCTGCGGGG 22
Db 1 TCCACCGCGGACCTGCGGGG 20
RESULT 199
ADH18262/C
ID ADH18262 standard; DNA; 20 BP.
XX
AC ADH18262;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 251.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PT 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 251; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic.
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 5 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;

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Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CTCGGTTGCTCCGCTGAGG 54
DB 20 CTCGGTTGCTCCGCTGAGG 1

RESULT 200
ADH18296/c
ID ADH18296 standard; DNA; 20 BP.
XX AC
XX ADH18296;
XX DT
XX 11-MAR-2004 (first entry)
XX DE
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 285.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS
XX Homo sapiens.
XX PN WO2003097662-A1.
XX PD
XX 27-NOV-2003.
XX PF
XX 15-MAY-2003; 2003WO-US015493.
XX PR
XX 15-MAY-2002; 2002US-00147196.
XX PR
XX 13-NOV-2002; 2002US-0426324P.
XX XX
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Crooke RM, Graham MJ;
XX PI
XX WPI; 2004-022840/02.
XX DR
XX 15-MAY-2003; 2003WO-US015493.
XX PF
XX 15-MAY-2002; 2002US-00147196.
XX PR
XX 13-NOV-2002; 2002US-0426324P.
XX XX
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Crooke RM, Graham MJ;
XX PI
XX WPI; 2004-022840/02.
XX DR
XX New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX XX
XX Claim 1; SEQ ID NO 285; 405pp; English.
XX PS
XX The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic.
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX XX
XX Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3230 GTTTGTAACCTCAAGCAGAAG 3249
DB 20 GTTTGTAACCTCAAGCAGAAG 1

RESULT 201
ADH18040/c
ID ADH18040 standard; DNA; 20 BP.

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XX ADH18040;
XX 11-MAR-2004 (first entry)
XX DE
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 29.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS
XX Homo sapiens.
XX PN WO2003097662-A1.
XX PD
XX 27-NOV-2003.
XX PF
XX 15-MAY-2003; 2003WO-US015493.
XX PR
XX 15-MAY-2002; 2002US-00147196.
XX PR
XX 13-NOV-2002; 2002US-0426324P.
XX XX
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Crooke RM, Graham MJ;
XX PI
XX WPI; 2004-022840/02.
XX DR
XX New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX XX
XX Example 15; SEQ ID NO 29; 405pp; English.
XX PS
XX The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic.
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1231 CACAGCTGATTGAGGTGTC 1250
DB 20 CACAGCTGATTGAGGTGTC 1

RESULT 202
ADH18153/c
ID ADH18153 standard; DNA; 20 BP.
XX AC
XX ADH18153;
XX DT
XX 11-MAR-2004 (first entry)
XX DE
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 142.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;

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KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 OS Homo sapiens.  
 PN WO2003097662-A1.  
 XX 27-NOV-2003.  
 PD  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 DR  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 142; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic.  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2299 GTCAGTTCCTCATGGTCTC 2318  
 DB 20 GTCAGTTCCTCATGGTCTC 1  
 RESULT 203  
 ADH18156/c  
 ID ADH18156 standard; DNA; 20 BP.  
 XX  
 AC ADH18156;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 145.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX

XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 DR  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 145; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic.  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2789 GGGCATCATCATCCGGACT 2808  
 DB 20 GGGCATCATCATCCGGACT 1  
 RESULT 204  
 ADH18219/c  
 ID ADH18219 standard; DNA; 20 BP.  
 XX  
 AC ADH18219;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 208.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 DR  
 XX



PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 208; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

SQ Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3059 CTCAGGCGCTTACTCCAACG 3078  
 Db 20 CTCAGGCGCTTACTCCAACG 1

RESULT 205

ADH18260/c  
 ID ADH18260 standard; DNA; 20 BP.

XX ADH18260;

DT 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 249.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

DR WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 249; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,

CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 2 A; 9 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CACCGGACCTGCGGGGCTG 25  
 Db 20 CACCGGACCTGCGGGGCTG 1

RESULT 206

ADH18527

ID ADH18527 standard; DNA; 20 BP.

XX ADH18527;

DT 11-MAR-2004 (first entry)

DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 516.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 516; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

SQ Sequence 20 BP; 6 A; 5 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 199 GCGCAGGCGCGAAGAGGAA 218  
 |||||  
 Db 1 GCGCAGGCGCGAAGAGGAA 20

RESULT 207  
 ADH18531  
 ID ADH18531 standard; DNA; 20 BP.  
 XX AC  
 XX ADH18531;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 520.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 520; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 799 CACTTGCTCTCATCAAGGC 818  
 |||||  
 Db 1 CACTTGCTCTCATCAAGGC 20

RESULT 208  
 ADH18594  
 ID ADH18594 standard; DNA; 20 BP.  
 XX AC  
 XX ADH18594;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 618.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 520; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4180 CTCCTCTGGGTGTTCTAGAC 4199  
 |||||  
 Db 1 CTCCTCTGGGTGTTCTAGAC 20

RESULT 209  
 ADH18629  
 ID ADH18629 standard; DNA; 20 BP.  
 XX AC  
 XX ADH18629;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 618.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 583; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

DT 11-MAR-2004 (first entry)  
 XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 583.  
 DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 XX anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 583; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4180 CTCCTCTGGGTGTTCTAGAC 4199  
 |||||  
 Db 1 CTCCTCTGGGTGTTCTAGAC 20

RESULT 209  
 ADH18629  
 ID ADH18629 standard; DNA; 20 BP.  
 XX AC  
 XX ADH18629;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 618.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 583; 405pp; English.  
 XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.  
 XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

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PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 618; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 35 CTCGGTTGCTGCGCGTGAGG 54
DB 1 CTCGGTTGCTGCGCGTGAGG 20
RESULT 210
ADH18670
ID ADH18670 standard; DNA; 20 BP.
XX
AC ADH18670;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 659.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 618; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 35 CTCGGTTGCTGCGCGTGAGG 54
DB 1 CTCGGTTGCTGCGCGTGAGG 20
RESULT 211
ADH18680
ID ADH18680 standard; DNA; 20 BP.
XX
AC ADH18680;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 669.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 669; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3246 GAAGGTGCGAAGCAGACTGA 3265
DB 1 GAAGGTGCGAAGCAGACTGA 20
RESULT 211
ADH18680
ID ADH18680 standard; DNA; 20 BP.
XX
AC ADH18680;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 669.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 669; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3246 GAAGGTGCGAAGCAGACTGA 3265
DB 1 GAAGGTGCGAAGCAGACTGA 20

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CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3266 GGTACCATGACATTCAAAT 3285
Db 1 GGCTACCATGACATTCAAAT 20

RESULT 212
ADH18196/c
ID ADH18196 standard; DNA; 20 BP.
XX
AC ADH18196;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 185.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 185; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3266 GGTACCATGACATTCAAAT 3285
Db 1 GGCTACCATGACATTCAAAT 20

RESULT 213
ADH18198/c
ID ADH18198 standard; DNA; 20 BP.
XX
AC ADH18198;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 187.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 187; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 389 CTGCAGCTTCATCTGAAGA 408
Db 20 CTGCAGCTTCATCTGAAGA 1

RESULT 214
ADH18199/c
ID ADH18199 standard; DNA; 20 BP.
XX
AC ADH18199;

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XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 188.
DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX Homo sapiens.
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 188; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 449 TGAGGGCAAGCCTTGCTCA 468
XX |||||
XX 20 TGAGGGCAAGCCTTGCTCA 1
XX
XX RESULT 215
XX ADH18201/c
XX ID ADH18201 standard; DNA; 20 BP.
XX AC ADH18201;
XX
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 190.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 188; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 449 TGAGGGCAAGCCTTGCTCA 468
XX |||||
XX 20 TGAGGGCAAGCCTTGCTCA 1
XX
XX RESULT 215
XX ADH18201/c
XX ID ADH18201 standard; DNA; 20 BP.
XX AC ADH18201;
XX
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 190.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 190; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 709 CGAGGAGGGCAATGTGGCA 728
XX |||||
XX 20 CGAGGAGGGCAATGTGGCA 1
XX
XX RESULT 216
XX ADH18210/c
XX ID ADH18210 standard; DNA; 20 BP.
XX AC ADH18210;
XX
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 199.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.

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XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.
XX 13-NOV-2002; 2002US-0426324P.
XX (ISIS-) ISIS PHARM INC.
XX Crooke RM, Graham MJ;
XX WPI; 2004-022840/02.
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX Claim 1; SEQ ID NO 190; 405pp; English.
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 709 CGAGGAGGGCAATGTGGCA 728
XX |||||
XX 20 CGAGGAGGGCAATGTGGCA 1
XX
XX RESULT 216
XX ADH18210/c
XX ID ADH18210 standard; DNA; 20 BP.
XX AC ADH18210;
XX
XX 11-MAR-2004 (first entry)
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 199.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX Homo sapiens.
XX OS
XX WO2003097662-A1.
XX 27-NOV-2003.
XX 15-MAY-2003; 2003WO-US015493.
XX 15-MAY-2002; 2002US-00147196.

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CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3250 GTGGAAGCAGACTGAGGCT 3269  
 DB 20 GTGGAAGCAGACTGAGGCT 1

RESULT 219  
 ADH18314/C  
 ID ADH18314 standard; DNA; 20 BP.  
 XX AC ADH18314;

XX DT 11-MAR-2004 (first entry)

XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 303.

XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX OS Homo sapiens.

XX PN WO2003097662-A1.

XX PD 27-NOV-2003.

XX PF 15-MAY-2003; 2003WO-US015493.

XX PR 15-MAY-2002; 2002US-00147196.

XX PR 13-NOV-2002; 2002US-0426324P.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2004-022840/02.

XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 303; 405pp; English.

XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic.  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX SQ Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3266 GGCTACCATGACATTCAAAT 3285  
 DB 20 GGCTACCATGACATTCAAAT 1

RESULT 220

ADH18533

ID ADH18533 standard; DNA; 20 BP.

XX AC ADH18533;

XX DT 11-MAR-2004 (first entry)

XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 522.

XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX OS Homo sapiens.

XX PN WO2003097662-A1.

XX PD 27-NOV-2003.

XX PF 15-MAY-2003; 2003WO-US015493.

XX PR 15-MAY-2002; 2002US-00147196.

XX PR 13-NOV-2002; 2002US-0426324P.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2004-022840/02.

XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 522; 405pp; English.

XX CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1459 CGCTGAGCCACGCGGTCAAC 1478  
 DB 1 CGCTGAGCCACGCGGTCAAC 20

RESULT 221

ADH18570

ID ADH18570 standard; DNA; 20 BP.

XX AC ADH18570;

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XX DT 11-MAR-2004 (first entry)
XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 559.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense inhibition target; human; ds.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX XX Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX XX
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX XX Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX XX
XX PD New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 559; 405pp; English.
XX XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the human ApoB antisense
XX CC inhibition target DNA of the invention.
XX XX
XX SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
XX XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX QY 829 CCTTGTCAACTCTGATCAGC 848
XX DB 1 CCTTGTCAACTCTGATCAGC 20
XX XX
XX RESULT 222
XX ADH18572
XX ID ADH18572 standard; DNA; 20 BP.
XX AC ADH18572;
XX XX
XX DT 11-MAR-2004 (first entry)
XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 561.
XX DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense inhibition target; human; ds.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX XX Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX XX

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XX PD 27-NOV-2003.
XX XX
XX PF 15-MAY-2003; 2003WO-US015493.
XX XX
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Crooke RM, Graham MJ;
XX XX
XX DR WPI; 2004-022840/02.
XX XX
XX PD New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidaemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 561; 405pp; English.
XX XX
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the human ApoB antisense
XX CC inhibition target DNA of the invention.
XX XX
XX SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
XX XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX QY 889 AGCATGTGGCAGAGCCATC 908
XX DB 1 AGCATGTGGCAGAGCCATC 20
XX XX
XX RESULT 223
XX ADH18583
XX ID ADH18583 standard; DNA; 20 BP.
XX AC ADH18583;
XX XX
XX DT 11-MAR-2004 (first entry)
XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 572.
XX DE apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense inhibition target; human; ds.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Crooke RM, Graham MJ;
XX XX
XX DR WPI; 2004-022840/02.
XX XX

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Db      1  ACCGAGCTGGCGATGGACC 20

RESULT 226
ADH18146/c
ID  ADH18146 standard; DNA; 20 BP.
XX
XX
AC  ADH18146;
XX
XX
DT  11-MAR-2004 (first entry)
XX
XX
DE  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 135.
XX
XX
KW  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW  anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW  human; ss.
XX
XX
OS  Homo sapiens.
XX
XX
PN  WO2003097662-A1.
XX
XX
PD  27-NOV-2003.
XX
XX
PF  15-MAY-2003; 2003WO-US015493.
XX
XX
PR  15-MAY-2002; 2002US-00147196.
XX
XX
PR  13-NOV-2002; 2002US-0426324P.
XX
XX
PA  (ISIS-) ISIS PHARM INC.
XX
XX
PI  Crooke RM, Graham MJ;
XX
XX
DR  WPI; 2004-022840/02.
XX
XX
PT  New antisense compound, useful for preparing a composition for treating
PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX
PS  Example 29; SEQ ID NO 135; 405pp; English.
XX
XX
CC  The invention relates to a novel antisense compound targeted to a nucleic
CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC  hybridises with and inhibits the expression of human apolipoprotein B.
CC  The compound of the invention demonstrates antiarteriosclerotic,
CC  cardiant, antidiabetic and anorectic activities and may be useful for
CC  preparing a composition for treating abnormal lipid or cholesterol
CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC  cardiovascular disease. Furthermore, the compound has gene therapy
CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC  phosphorothioate backbone throughout and in which all cytidine residues
CC  are 5-methylcytidines.
XX
SQ  Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy  1179 CTGGTTACTGAGCTGAGAGG 1198
      |||||
Db      20 CTGGTTACTGAGCTGAGAGG 1

RESULT 227
ADH18049/c
ID  ADH18049 standard; DNA; 20 BP.
XX
XX
AC  ADH18049;
XX
XX
DT  11-MAR-2004 (first entry)
XX
XX
DE  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 134.
XX
XX
KW  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW  anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW  human; ss.
XX
XX
OS  Homo sapiens.
XX
XX
PN  WO2003097662-A1.
XX
XX
PD  27-NOV-2003.
XX
XX
PF  15-MAY-2003; 2003WO-US015493.
XX
XX
PR  15-MAY-2002; 2002US-00147196.
XX
XX
PR  13-NOV-2002; 2002US-0426324P.
XX
XX
PA  (ISIS-) ISIS PHARM INC.
XX
XX
PI  Crooke RM, Graham MJ;
XX
XX
DR  WPI; 2004-022840/02.
XX
XX
PT  New antisense compound, useful for preparing a composition for treating
PT  abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT  2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX
PS  Example 15; SEQ ID NO 38; 405pp; English.
XX
XX
CC  The invention relates to a novel antisense compound targeted to a nucleic
CC  acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC  hybridises with and inhibits the expression of human apolipoprotein B.
CC  The compound of the invention demonstrates antiarteriosclerotic,
CC  cardiant, antidiabetic and anorectic activities and may be useful for
CC  preparing a composition for treating abnormal lipid or cholesterol
CC  metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC  cardiovascular disease. Furthermore, the compound has gene therapy
CC  applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC  MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC  phosphorothioate backbone throughout and in which all cytidine residues
CC  are 5-methylcytidines.
XX
SQ  Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy  2842 TCTTCCACGAGTCGGGTCGTG 2861
      |||||
Db      20 TCTTCCACGAGTCGGGTCGTG 1

RESULT 228
ADH18135/c
ID  ADH18135 standard; DNA; 20 BP.
XX
XX
AC  ADH18135;
XX
XX
DT  11-MAR-2004 (first entry)
XX
XX
DE  2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 124.
XX
XX
KW  apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW  anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW  diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW  antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW  human; ss.
XX
XX
OS  Homo sapiens.

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XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Example 29; SEQ ID NO 124; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridizes with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 199 GCGCCAGGCGCGAAGAGGAA 218
DB 20 GCGCCAGGCGCGAAGAGGAA 1

RESULT 229
ADH18138/c
ID ADH18138 standard; DNA; 20 BP.
XX AC ADH18138;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 127.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 127; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridizes with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 429 GAGGTGTATGCTTCAACCC 448
DB 20 GAGGTGTATGCTTCAACCC 1

RESULT 230
ADH18147/c
ID ADH18147 standard; DNA; 20 BP.
XX AC ADH18147;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 136.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.

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PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX PD WPI; 2004-022840/02.
XX PF New antisense compound, useful for preparing a composition for treating
XX PR abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PR 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 127; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX CC hybridizes with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 429 GAGGTGTATGCTTCAACCC 448
DB 20 GAGGTGTATGCTTCAACCC 1

RESULT 230
ADH18147/c
ID ADH18147 standard; DNA; 20 BP.
XX AC ADH18147;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 136.
XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX KW human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PT New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.

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PS Claim 1; SEQ ID NO 136; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1279 AGTGTGGACAGCCTCAGTGC 1298  
|||||  
Db 20 AGTGTGGACAGCCTCAGTGC 1

RESULT 231  
ADH18204/c

ID ADH18204 standard; DNA; 20 BP.

XX ADH18204;

XX 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 193.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic; anorectic; lipid; cholesterol metabolism; atherosclerosis; diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy; antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE; human; ss.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 193; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications.

CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 889 AGCATGTGGCAGAGCCATC 908  
|||||  
Db 20 AGCATGTGGCAGAGCCATC 1

RESULT 232  
ADH18216/c

ID ADH18216 standard; DNA; 20 BP.

XX ADH18216;

XX 11-MAR-2004 (first entry)

XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 205.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic; anorectic; lipid; cholesterol metabolism; atherosclerosis; diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy; antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE; human; ss.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 205; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B.

CC The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.

XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	2649	GGAGCTGGATTACAGTTGCA	2668
DB	20	GGAGCTGGATTACAGTTGCA	1
 RESULT 233 ADH18627/c			
ID	ADH18627	standard; DNA; 20 BP.	
XX			
AC	ADH18627;		
XX			
DT	11-MAR-2004	(first entry)	
XX			
DE			
XX			
DE	2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 256.		
XX			
KW	apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;		
KW	anorectic; lipid; cholesterol metabolism; atherosclerosis;		
KW	diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;		
KW	antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;		
KW	human; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WO2003097662-A1.		
XX			
PD	27-NOV-2003.		
XX			
Pf	15-MAY-2003; 2003WO-US015493.		
PR	15-MAY-2002; 2002US-00147196.		
PR	13-NOV-2002; 2002US-0426324P.		
PA	(ISIS-) ISIS PHARM INC.		
PI	Crooke RM, Graham MJ;		
PI	WPI; 2004-022840/02.		
PF	15-MAY-2003; 2003WO-US015493.		
PR	15-MAY-2002; 2002US-00147196.		
PR	13-NOV-2002; 2002US-0426324P.		
PS	(ISIS-) ISIS PHARM INC.		
PI	Crooke RM, Graham MJ;		
PI	WPI; 2004-022840/02.		
PT	New antisense compound, useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or cardiovascular disease.		
PT	Claim 1; SEQ ID NO 256; 405pp; English.		
XX			
CC	The invention relates to a novel antisense compound targeted to a nucleic acid molecule encoding human apolipoprotein B (ApoB) which specifically hybridises with and inhibits the expression of human apolipoprotein B. The compound of the invention demonstrates antiarteriosclerotic, cardiant, antidiabetic and anorectic activities and may be useful for preparing a composition for treating abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or cardiovascular disease. Furthermore, the compound has gene therapy applications. The current sequence is that of the 2'-O-methoxyethyl (2'-' MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a phosphorothioate backbone throughout and in which all cytidine residues are 5-methylcytidines.		
CC	Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;		
CC	Query Match 0.1%; Score 20; DB 1; Length 20;		
CC	Best Local Similarity 100.0%; Pred. No. 4.8e+02;		
CC	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
QY	116 ACCGCAGCTGGCGATGGACC	135	
DB	20 ACCGCAGCTGGCGATGGACC	1	
 RESULT 234 ADH18627			
ID	ADH18627	standard; DNA; 20 BP.	
XX			

PN WO2003097662-A1.  
XX  
PD 27-NOV-2003.  
XX  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX WPI; 2004-022840/02.  
DR  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 656; 405pp; English.  
PS  
XX The invention relates to a novel antisense compound targeted to a nucleic  
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
XX Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 3240 CAAGCAGAGGTGCGAAGCA 3259  
Db 1 CAAGCAGAGGTGCGAAGCA 20  
RESULT 236  
ADH18668  
ID ADH18668 standard; DNA; 20 BP.  
XX  
XX ADH18668;  
AC  
XX 11-MAR-2004 (first entry)  
DT  
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 657.  
DE  
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense inhibition target; human; ds.  
XX  
XX Homo sapiens.  
OS  
XX WO2003097662-A1.  
PN  
XX 27-NOV-2003.  
PD  
XX 15-MAY-2003; 2003WO-US015493.  
PF  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX

DR WPI; 2004-022840/02.  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 657; 405pp; English.  
PS  
XX The invention relates to a novel antisense compound targeted to a nucleic  
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
XX Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 3242 AGCAGAGGTGCGAAGCAGA 3261  
Db 1 AGCAGAGGTGCGAAGCAGA 20  
RESULT 237  
ADH18143/C  
ID ADH18143 standard; DNA; 20 BP.  
XX  
XX ADH18143;  
AC  
XX 11-MAR-2004 (first entry)  
DT  
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 132.  
DE  
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
KW human; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO2003097662-A1.  
PN  
XX 27-NOV-2003.  
PD  
XX 15-MAY-2003; 2003WO-US015493.  
PF  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX WPI; 2004-022840/02.  
DR  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 132; 405pp; English.  
PS  
XX The invention relates to a novel antisense compound targeted to a nucleic  
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
XX Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
SQ

CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 756 GGGCAGTGTGATCGCTTCAA 775  
 DB 20 GGGCAGTGTGATCGCTTCAA 1  
 RESULT 238  
 ADH18145/c  
 ID ADH18145 standard; DNA; 20 BP.  
 XX  
 AC ADH18145;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 134.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 134; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 869 CACACTGGACGCTAAGAGGA 888  
 DB 20 CACACTGGACGCTAAGAGGA 1

RESULT 239  
 ADH18155/c  
 ID ADH18155 standard; DNA; 20 BP.  
 XX  
 AC ADH18155;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 144.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 144; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2518 AGCTGCTTCTGATGGTGCC 2537  
 DB 20 AGCTGCTTCTGATGGTGCC 1

KW	antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW	human; ss.
XX	
XX	Homo sapiens.
OS	
XX	WO2003097662-A1.
PN	
XX	27-NOV-2003.
PD	
XX	
XX	15-MAY-2003; 2003WO-US015493.
PR	
XX	15-MAY-2002; 2002US-00147196.
PR	
XX	13-NOV-2002; 2002US-042632AP.
PR	
XX	(ISIS-) ISIS PHARM INC.
PA	
XX	Crooke RM, Graham MJ;
PI	
XX	WPI; 2004-022840/02.
DR	
XX	New antisense compound, useful for preparing a composition for treating
PT	abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT	2, obesity, hyperlipidemia or cardiovascular disease.
PT	
XX	
PS	Claim 4; SEQ ID NO 17; 405pp; English.
CC	
CC	The invention relates to a novel antisense compound targeted to a nucleic
CC	acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC	hybridizes with and inhibits the expression of human apolipoprotein B.
CC	The compound of the invention demonstrates antiarteriosclerotic,
CC	cardiant, antidiabetic and anorectic activities and may be useful for
CC	preparing a composition for treating abnormal lipid or cholesterol
CC	metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC	cardiovascular disease. Furthermore, the compound has gene therapy
CC	applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC	MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC	phosphorothioate backbone throughout and in which all cytidine residues
CC	are 5-methylcytidines.
XX	
XX	Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
SQ	
Query Match            0.1%; Score 20; DB 1; Length 20;	
Best Local Similarity 100.0%; Pred. No. 4.9e+02;	
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0	
OY	1 ATTCCCACCGGACCTGCCG 20
Db	20 ATTCCCACCGGACCTGCCG 1
RESULT 242	
ADH18038/c	
ID	ADH18038 standard; DNA; 20 BP.
XX	
XX	ADH18038;
XX	
DT	11-MAR-2004 (first entry)
XX	
DE	2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 27.
XX	
XX	apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX	anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW	diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW	antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW	human; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO2003097662-A1.
XX	
XX	27-NOV-2003.
PD	
PF	
XX	15-MAY-2003; 2003WO-US015493.





CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1499 TACAGGGACCCAGGAGCTGC 1518  
 DB 20 TACAGGGACCCAGGAGCTGC 1  
 RESULT 245  
 ADH18162/c  
 ID ADH18162 standard; DNA; 20 BP.  
 XX  
 AC ADH18162;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 151.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 151; 405pp; English.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 151; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4579 TCAAGATTGATGGCAGTTC 4598  
 DB 20 TCAAGATTGATGGCAGTTC 1

RESULT 246  
 ADH18197/c  
 ID ADH18197 standard; DNA; 20 BP.  
 XX  
 AC ADH18197;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 186.  
 XX  
 KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI; 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 186; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 269 GCACCTCCGGAAGTACACAT 288  
 DB 20 GCACCTCCGGAAGTACACAT 1

```

RESULT 247
ADH18217/c
ID ADH18217 standard; DNA; 20 BP.
XX AC ADH18217;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human Apob DNA 1 - SEQ ID 206.
XX KW apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 206; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (Apob) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2729 CAACATGCAGGCTGAACCTGG 2748
Db 20 CAACATGCAGGCTGAACCTGG 1

RESULT 248
ADH18228/c
ID ADH18228 standard; DNA; 20 BP.
XX AC ADH18228;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human Apob DNA 1 - SEQ ID 217.
XX KW apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 206; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (Apob) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2729 CAACATGCAGGCTGAACCTGG 2748
Db 20 CAACATGCAGGCTGAACCTGG 1

RESULT 249
ADH18302/c
ID ADH18302 standard; DNA; 20 BP.
XX AC ADH18302;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human Apob DNA 1 - SEQ ID 291.
XX KW apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 217; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (Apob) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4511 GGGACACACAGATGTCGCTT 4530
Db 20 GGGACACACAGATGTCGCTT 1

RESULT 249
ADH18302/c
ID ADH18302 standard; DNA; 20 BP.
XX AC ADH18302;
XX DT 11-MAR-2004 (first entry)
XX DE 2'-MOE gapmer antisense oligo targeted to human Apob DNA 1 - SEQ ID 291.
XX KW apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX OS Homo sapiens.
XX PN WO2003097662-A1.
XX PD 27-NOV-2003.
XX PF 15-MAY-2003; 2003WO-US015493.
XX PR 15-MAY-2002; 2002US-00147196.
XX PR 13-NOV-2002; 2002US-0426324P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2004-022840/02.
XX PF New antisense compound, useful for preparing a composition for treating
XX PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX PS Claim 1; SEQ ID NO 217; 405pp; English.
XX CC The invention relates to a novel antisense compound targeted to a nucleic
XX CC acid molecule encoding human apolipoprotein B (Apob) which specifically
XX CC hybridises with and inhibits the expression of human apolipoprotein B.
XX CC The compound of the invention demonstrates antiarteriosclerotic,
XX CC cardiant, antidiabetic and anorectic activities and may be useful for
XX CC preparing a composition for treating abnormal lipid or cholesterol
XX CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX CC cardiovascular disease. Furthermore, the compound has gene therapy
XX CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX CC phosphorothioate backbone throughout and in which all cytidine residues
XX CC are 5-methylcytidines.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4511 GGGACACACAGATGTCGCTT 4530
Db 20 GGGACACACAGATGTCGCTT 1

```

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PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 291; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3242 AGCAGAAGGTGCGAAGCAGA 3261
Db 20 AGCAGAAGGTGCGAAGCAGA 1
|||||
RESULT 250
ADH18530
ID ADH18530 standard; DNA; 20 BP.
XX
XX ADH18530;
AC
XX 11-MAR-2004 (first entry)
DT
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 519.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 291; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3242 AGCAGAAGGTGCGAAGCAGA 3261
Db 20 AGCAGAAGGTGCGAAGCAGA 1
|||||
RESULT 250
ADH18530
ID ADH18530 standard; DNA; 20 BP.
XX
XX ADH18530;
AC
XX 11-MAR-2004 (first entry)
DT
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 519.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 291; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3242 AGCAGAAGGTGCGAAGCAGA 3261
Db 20 AGCAGAAGGTGCGAAGCAGA 1
|||||
RESULT 251
ADH18573
ID ADH18573 standard; DNA; 20 BP.
XX
XX ADH18573;
AC
XX 11-MAR-2004 (first entry)
DT
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 562.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 562; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 756 GGGCAGTGTGATCGCTTCAA 775
Db 1 GGGCAGTGTGATCGCTTCAA 20
|||||

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DR WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 519; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 756 GGGCAGTGTGATCGCTTCAA 775
Db 1 GGGCAGTGTGATCGCTTCAA 20
|||||
RESULT 251
ADH18573
ID ADH18573 standard; DNA; 20 BP.
XX
XX ADH18573;
AC
XX 11-MAR-2004 (first entry)
DT
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 562.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
PN
XX 27-NOV-2003.
PD
XX
XX 15-MAY-2003; 2003WO-US015493.
PF
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 562; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 756 GGGCAGTGTGATCGCTTCAA 775
Db 1 GGGCAGTGTGATCGCTTCAA 20
|||||

```

CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1059 GAGAGCACCACCAATCCACATC 1078  
 DB 1 GAGAGCACCACCAATCCACATC 20

RESULT 252  
 ADH18676

ID ADH18676 standard; DNA; 20 BP.

XX ADH18676;

DT 11-MAR-2004 (first entry)

DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 665.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Claim 1; SEQ ID NO 665; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human ApoB antisense  
 CC inhibition target DNA of the invention.

XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3258 CAGACTGAGGCTACCATGAC 3277

DB 1 CAGACTGAGGCTACCATGAC 20

RESULT 253

ADH18054/c

ID ADH18054 standard; DNA; 20 BP.

XX ADH18054;

DT 11-MAR-2004 (first entry)

DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 43.

XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.

XX Homo sapiens.

XX WO2003097662-A1.

XX 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

XX 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.

XX Example 15; SEQ ID NO 43; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4281 CTTGGGCTCGTTACCATC 4300  
 DB 20 CTTGGGCTCGTTACCATC 1

RESULT 254

ADH18144/c

ID ADH18144 standard; DNA; 20 BP.

XX ADH18144;

XX

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DT 11-MAR-2004 (first entry)
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 133.
XX
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 133; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 799 CACTTGCTCTCATCAAGGC 818
DB 20 CACTTGCTCTCATCAAGGC 1
|||||
RESULT 255
ADH18160/c
ID ADH18160 standard; DNA; 20 BP.
XX
XX ADH18160;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 149.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 133; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3919 AGAACATGGGATGCCAGAC 3938
DB 20 AGAACATGGGATGCCAGAC 1
|||||
RESULT 256
ADH18202/c
ID ADH18202 standard; DNA; 20 BP.
XX
XX ADH18202;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 191.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX

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XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX XX WPI; 2004-022840/02.  
 XX DR  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX XX  
 XX PS Claim 1; SEQ ID NO 191; 405pp; English.  
 XX XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX XX  
 SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 829 CCTGTCAACTCTGATCAGC 848  
 DB 20 CCTGTCAACTCTGATCAGC 1  
 RESULT 257  
 ADH18299/c  
 ID ADH18299 standard; DNA; 20 BP.  
 AC ADH18299;  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 288.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX WO2003097662-A1.  
 PN 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX DR  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.

XX PS Claim 1; SEQ ID NO 288; 405pp; English.  
 XX XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX XX  
 SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3236 AACTCAAGCAGAGGTGCGA 3255  
 DB 20 AACTCAAGCAGAGGTGCGA 1  
 RESULT 258  
 ADH18528  
 ID ADH18528 standard; DNA; 20 BP.  
 XX ADH18528;  
 AC ADH18528;  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 517.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX OS Homo sapiens.  
 XX WO2003097662-A1.  
 PN 27-NOV-2003.  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 517; 405pp; English.  
 XX XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy

```
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
    Query Match      0.1%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 4.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 509 CAGGTATGAGCTCAAGCTGG 528
Db 1 CAGGTATGAGCTCAAGCTGG 20

RESULT 259
ADH18673
ID ADH18673 standard; DNA; 20 BP.
XX
AC ADH18673;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 662.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 662; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
    Query Match      0.1%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 4.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3252 GCGAAGCAGACTGAGGCTAC 3271
Db 1 GCGAAGCAGACTGAGGCTAC 20

CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
    Query Match      0.1%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 4.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3234 GTAACTCAAGCAGAGGCTGC 3253
Db 1 GTAACTCAAGCAGAGGCTGC 20

RESULT 261
ADH18258/C
ID ADH18258 standard; DNA; 20 BP.
XX
AC ADH18258;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 247.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
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RESULT 260
ADH18664
ID ADH18664 standard; DNA; 20 BP.
XX
AC ADH18664;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 653.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense inhibition target; human; ds.
XX
OS Homo sapiens.
XX
PN WO2003097662-A1.
XX
PD 27-NOV-2003.
XX
PF 15-MAY-2003; 2003WO-US015493.
XX
PR 15-MAY-2002; 2002US-00147196.
XX
PR 13-NOV-2002; 2002US-0426324P.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke RM, Graham MJ;
XX
DR WPI; 2004-022840/02.
XX
PT New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS Claim 1; SEQ ID NO 653; 405pp; English.
XX
CC The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiant, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the human ApoB antisense
CC inhibition target DNA of the invention.
XX
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
    Query Match      0.1%; Score 20; DB 1; Length 20;
    Best Local Similarity 100.0%; Pred. No. 4.8e+02;
    Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3234 GTAACTCAAGCAGAGGCTGC 3253
Db 1 GTAACTCAAGCAGAGGCTGC 20

RESULT 261
ADH18258/C
ID ADH18258 standard; DNA; 20 BP.
XX
AC ADH18258;
XX
DT 11-MAR-2004 (first entry)
XX
DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 247.
XX
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
```



KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 XX human; ss.  
 OS Homo sapiens.  
 XX WO2003097662-A1.  
 PN 27-NOV-2003.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke RM, Graham MJ;  
 XX WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 247; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
 DB 20 GGTGCGAAGCAGACTGAGGC 1  
 |||||  
 RESULT 262  
 ADH18297/c  
 ID ADH18297 standard; DNA; 20 BP.  
 XX  
 AC ADH18297;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 286.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX  
 OS Homo sapiens.  
 XX WO2003097662-A1.  
 PN 27-NOV-2003.  
 XX

PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 PI WPI; 2004-022840/02.  
 DR  
 XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 286; 405pp; English.  
 PS  
 XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 XX Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3232 TTGTAAGCTCAAGCAGAAAGGT 3251  
 DB 20 TTGTAAGCTCAAGCAGAAAGGT 1  
 |||||  
 RESULT 263  
 ADH18529  
 ID ADH18529 standard; DNA; 20 BP.  
 XX  
 AC ADH18529;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 518.  
 DE  
 XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX WO2003097662-A1.  
 PN 27-NOV-2003.  
 PD  
 XX 15-MAY-2003; 2003WO-US015493.  
 PF  
 XX 15-MAY-2002; 2002US-00147196.  
 PR  
 XX 13-NOV-2002; 2002US-0426324P.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke RM, Graham MJ;  
 PI WPI; 2004-022840/02.  
 DR  
 XX

PT	New antisenese compound, useful for preparing a composition for treating	
PT	abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type	
PT	2, obesity, hyperlipidemia or cardiovascular disease.	
XX		
PS	Claim 1; SEQ ID NO 518; 405pp; English.	
XX		
CC	The invention relates to a novel antisenese compound targeted to a nucleic	
CC	acid molecule encoding human apolipoprotein B (ApoB) which specifically	
CC	hybridises with and inhibits the expression of human apolipoprotein B.	
CC	The compound of the invention demonstrates antiarteriosclerotic,	
CC	cardiant, antidiabetic and anorectic activities and may be useful for	
CC	preparing a composition for treating abnormal lipid or cholesterol	
CC	metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or	
CC	cardiovascular disease. Furthermore, the compound has gene therapy	
CC	applications. The current sequence is that of the human ApoB antisenese	
CC	inhibition target DNA of the invention.	
XX		
SQ	Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 20; DB 1; Length 20;	
	Best Local Similarity 100.0%; Pred. No. 4.8e+02;	
	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Qy	584 CATCTGAACATCAAGAGGG 603	
Db	1 CATCTGAACATCAAGAGGG 20	
RESULT 264		
ADH18538		
ID	ADH18538 standard; DNA; 20 BP.	
XX		
AC	ADH18538;	
XX		
DT	11-MAR-2004 (first entry)	
XX		
DE	Human apolipoprotein B antisenese inhibition target DNA - SEQ ID 527.	
XX		
KW	apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;	
KW	anorectic; lipid; cholesterol metabolism; atherosclerosis;	
KW	diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;	
KW	antisenese inhibition target; human; ds.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2003097662-A1.	
XX		
PD	27-NOV-2003.	
XX		
PF	15-MAY-2003; 2003WO-US015493.	
XX		
PR	15-MAY-2002; 2002US-00147196.	
PR	13-NOV-2002; 2002US-0426324P.	
XX		
PA	(ISIS-) ISIS PHARM INC.	
XX		
PI	Crooke RM, Graham MJ;	
XX		
DR	WPI; 2004-022840/02.	
XX		
PT	New antisenese compound, useful for preparing a composition for treating	
PT	abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type	
PT	2, obesity, hyperlipidemia or cardiovascular disease.	
XX		
PS	Claim 1; SEQ ID NO 527; 405pp; English.	
XX		
CC	The invention relates to a novel antisenese compound targeted to a nucleic	
CC	acid molecule encoding human apolipoprotein B (ApoB) which specifically	
CC	hybridises with and inhibits the expression of human apolipoprotein B.	
CC	The compound of the invention demonstrates antiarteriosclerotic,	
CC	cardiant, antidiabetic and anorectic activities and may be useful for	
CC	preparing a composition for treating abnormal lipid or cholesterol	
CC	metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or	

```

DE XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 34.
KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Example 15; SEQ ID NO 34; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2331 GTGACCACTTGGCTATAC 2350
Db ||||||||||||||||
20 GTGACCACTTGGCTATAC 1

RESULT 268
ADH18039/c
ID ADH18039 standard; DNA; 20 BP.
XX
XX AC ADH18039;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 128.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX OS
XX
XX RESULT 267
ADH18045/c
ID ADH18045 standard; DNA; 20 BP.
XX
XX AC ADH18045;
XX
XX 11-MAR-2004 (first entry)
XX
XX OS
XX

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PN W02003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 128; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 509 CAGGTATGAGCTCAAGCTGG 528
DB 20 CAGGTATGAGCTCAAGCTGG 1
|||||
RESULT 269
ADH18149/C
ID ADH18149 standard; DNA; 20 BP.
XX
XX ADH18149;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 138.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX W02003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 140; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1459 CGCTGAGCCACGGGTCAC 1478
DB 20 CGCTGAGCCACGGGTCAC 1
|||||
RESULT 270
ADH18151/C
ID ADH18151 standard; DNA; 20 BP.
XX
XX ADH18151;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 140.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX W02003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 140; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1459 CGCTGAGCCACGGGTCAC 1478
DB 20 CGCTGAGCCACGGGTCAC 1
|||||

```

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1859 TGTCCAAATTTCTACCATGGG 1878  
 DB 20 TGTCCAAATTTCTACCATGGG 1

RESULT 271  
 ADH18206/c  
 ID ADH18206 standard; DNA; 20 BP.  
 XX AC ADH18206;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 195.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 195; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1859 TGTCCAAATTTCTACCATGGG 1878  
 DB 20 TGTCCAAATTTCTACCATGGG 1

RESULT 271  
 ADH18206/c  
 ID ADH18206 standard; DNA; 20 BP.  
 XX AC ADH18206;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 195.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 195; 405pp; English.

CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1199 CCTCAGTGTGATGAAGCAGTCA 1218  
 DB 20 CCTCAGTGTGATGAAGCAGTCA 1

RESULT 272  
 ADH18211/c  
 ID ADH18211 standard; DNA; 20 BP.  
 XX AC ADH18211;  
 XX DT 11-MAR-2004 (first entry)  
 XX DE 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 200.  
 XX KW apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KW human; ss.  
 XX OS Homo sapiens.  
 XX PN WO2003097662-A1.  
 XX PD 27-NOV-2003.  
 XX PF 15-MAY-2003; 2003WO-US015493.  
 XX PR 15-MAY-2002; 2002US-00147196.  
 XX PR 13-NOV-2002; 2002US-0426324P.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke RM, Graham MJ;  
 XX DR WPI; 2004-022840/02.  
 XX PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX PS Claim 1; SEQ ID NO 200; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiant, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.

XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1699 AGAAGCTGCCATCCAGGCT 1718
Db 20 AGAAGCTGCCATCCAGGCT 1

RESULT 273
ADH18224/C
ID ADH18224 standard; DNA; 20 BP.
AC ADH18224;
XX
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 213.
DE
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiand; antidiabetic;
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW human; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
PR 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 213; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC hybridises with and inhibits the expression of human apolipoprotein B.
CC The compound of the invention demonstrates antiarteriosclerotic,
CC cardiand, antidiabetic and anorectic activities and may be useful for
CC preparing a composition for treating abnormal lipid or cholesterol
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC cardiovascular disease. Furthermore, the compound has gene therapy
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC phosphorothioate backbone throughout and in which all cytidine residues
CC are 5-methylcytidines.
XX
XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3579 GACTCATCTGCTACAGCTTA 3598
Db 20 GACTCATCTGCTACAGCTTA 1

RESULT 274
ADO32583/C
ID ADO32583 standard; DNA; 20 BP.
XX
XX ADO32583;

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XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 31.
XX
DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiand; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; norectic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methycytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
PR 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 15; SEQ ID NO 31; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiand,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotropic, neuroprotective and norectic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
SQ

```

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1561 GCACGGGGATGAAGATTAC 1580  
 Db 20 GCACGGGGATGAAGATTAC 1

RESULT 275  
 ADO32590/c  
 ID ADO32590 standard; DNA; 20 BP.  
 XX  
 AC ADO32590;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 38.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 15; SEQ ID NO 38; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or

tissues in vivo in order to address a condition associated with abnormal  
 lipid or cholesterol metabolism. The compound may be useful for  
 decreasing circulating lipoprotein levels, triglyceride levels,  
 cholesterol levels, lipid levels, fatty acid levels, acute phase  
 reactants and chylomicrons and thus may be utilised during treatment of  
 hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 diabetes, obesity and atherosclerosis. The current sequence is that of an  
 antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 targeted to human ApoB RNA.

Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2842 TCTTCCACGAGTCGGGTCTG 2861  
 Db 20 TCTTCCACGAGTCGGGTCTG 1

RESULT 276  
 ADO32591/c  
 ID ADO32591 standard; DNA; 20 BP.  
 XX  
 AC ADO32591;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 39.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA





```
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
OS Homo sapiens.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 212; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3488 CAAGGCTGTTATTCATAC 3507
XX |||||
XX Db 20 CAAGGCTGTTATTCATAC 1
XX
XX RESULT 279
XX ADO32767/c
XX ID ADO32767 standard; DNA; 20 BP.
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XX ADO32767;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 215.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 215; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
```

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XX SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4180 CTCTCCTGGGTGTTCTAGAC 4199
Db 20 CTCTCCTGGGTGTTCTAGAC 1

RESULT 280
AD032841/c
XX AD032841;
XX
XX
XX 12-AUG-2004 (first entry)
XX Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 289.
XX
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 30; SEQ ID NO 289; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

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CC CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human Apob RNA.
XX
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3238 CTCACGACGAGGTGCGAAG 3257
Db 20 CTCACGACGAGGTGCGAAG 1

RESULT 281
AD032846/c
XX AD032846 standard; DNA; 20 BP.
XX
XX AC AD032846;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 294.
XX
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 30; SEQ ID NO 289; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

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XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX  
XX Example 30; SEQ ID NO 294; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human ApoB RNA.  
XX  
XX Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 3248 AGGTGCGAAGCAGCTGAGG 3267  
XX |||||  
XX DB 20 AGGTGCGAAGCAGCTGAGG 1  
XX  
XX RESULT 282  
XX ADO33110  
XX ID ADO33110 standard; DNA; 20 BP.  
XX AC ADO33110;  
XX XX  
XX 12-AUG-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 558.  
XX  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
XX neuroprotective; nootropic; lipid; cholesterol metabolism;  
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.  
XX  
XX OS Homo sapiens.  
XX  
XX WO2004044181-A2.  
XX PN  
XX 27-MAY-2004.  
XX PD  
XX 13-NOV-2003; 2003WO-US036411.  
XX XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX PR

PR 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 36; SEQ ID NO 558; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 709 CGAGGAAGGCGCAATGTGGCA 728  
XX |||||  
XX DB 1 CGAGGAAGGCGCAATGTGGCA 20  
XX  
XX RESULT 283  
XX ADO33112  
XX ID ADO33112 standard; DNA; 20 BP.  
XX AC ADO33112;  
XX XX  
XX 12-AUG-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 560.  
XX  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
XX neuroprotective; nootropic; lipid; cholesterol metabolism;  
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.  
XX  
XX OS Homo sapiens.  
XX

PN WO2004044181-A2.  
 XX 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 36; SEQ ID NO 560; 483pp; English.  
 PS The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 849 AGCAGCCAGTCTCTGTCAGTA 868  
 DB 1 AGCAGCCAGTCTCTGTCAGTA 20  
 RESULT 284  
 AD033119  
 ID AD033119 standard; DNA; 20 BP.  
 XX AC AD033119;  
 XX 12-AUG-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 567.  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease, Alzheimer's disease, dementia,  
 KW diabetes, obesity and atherosclerosis. The current sequence is that of a  
 KW human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 KW invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1678 CAAAGCCATCACTGATGATC 1697  
 DB 1 CAAAGCCATCACTGATGATC 20  
 RESULT 285  
 AD033134  
 ID AD033134 standard; DNA; 20 BP.  
 XX AC AD033134;  
 XX 12-AUG-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 582.  
 XX

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.

XX Homo sapiens.

XX WO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.

XX 13-NOV-2002; 2002US-0426234P.

XX 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX Example 36; SEQ ID NO 582; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 20; DB 1; Length 20;

XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;

XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4039 GCAATCTCTCCAGATCTTA 4058

DB 1 GCAATCTCTCCAGATCTTA 20

RESULT 286

ADO33166

ID ADO33166 standard; DNA; 20 BP.

XX

AC ADO33166;

DT 12-AUG-2004 (first entry)

XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 614.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.

XX Homo sapiens.

XX WO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.

XX 13-NOV-2002; 2002US-0426234P.

XX 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX Example 36; SEQ ID NO 614; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 20; DB 1; Length 20;

XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;

XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3249 GGTGCGAGCAGACTGAGGC 3268

```

Db      1 GGTGGAGACGACTGAGGC 20
|||||
RESULT 287
ADO32586/c
ID      ADO32586 standard; DNA; 20 BP.
XX
XX      ADO32586;
AC
XX
XX      12-AUG-2004 (first entry)
DT
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 34.
DE
XX
XX      apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW      antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX      Homo sapiens.
OS
XX
XX      Key      Location/Qualifiers
XX      modified_base 1..20
XX      /tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 15; SEQ ID NO 34; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and nootropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

```

```

CC      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC      impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to human Apob RNA.
XX
XX      Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
SQ      Query Match      0.1%; Score 20; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
      Qy      2331 GTGGACCACCTTGGCTATAC 2350
      Db      20 GTGGACCACCTTGGCTATAC 1
      |||||||
RESULT 288
ADO32588/c
ID      ADO32588 standard; DNA; 20 BP.
XX
XX      ADO32588;
AC
XX
XX      12-AUG-2004 (first entry)
DT
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 36.
DE
XX
XX      apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW      antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX      Homo sapiens.
OS
XX
XX      Key      Location/Qualifiers
XX      modified_base 1..20
XX      /tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 15; SEQ ID NO 36; 483pp; English.
XX

```

CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasoprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2573 GGTTCATCAGGAGGGCTCAA 2592  
 Db 20 GGTTCATCAGGAGGGCTCAA 1  
 RESULT 289  
 ADO32589/c  
 ID ADO32589 standard; DNA; 20 BP.  
 XX  
 AC ADO32589;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 37.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 PS Example 15; SEQ ID NO 37; 483bp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 XX endocrine, vasoprotective and neurotropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX tissues in vivo in order to address a condition associated with abnormal  
 XX lipid or cholesterol metabolism. The compound may be useful for  
 XX decreasing circulating lipoprotein levels, triglyceride levels,  
 XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX reactants and chylomicrons and thus may be utilised during treatment of  
 XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
 XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 XX targeted to human ApoB RNA.  
 SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2811 GCTAGGAGTGGGGTCCAGAT 2830  
 Db 20 GCTAGGAGTGGGGTCCAGAT 1  
 RESULT 290  
 ADO32597/c  
 ID ADO32597 standard; DNA; 20 BP.  
 XX  
 AC ADO32597;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 45.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.

```

FH Key      Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 15; SEQ ID NO 45; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match      0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Oy 4641 TGTCAGAGGGATCCTAACAC 4660
Db 20 TGTCAGAGGGATCCTAACAC 1
XX
XX RESULT 291
XX ADO32690/C
XX ID ADO32690 standard; DNA; 20 BP.
XX
XX ADO32690;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 138.

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XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key      Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 138; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match      0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 1459 CGCTGAGCCACGGGTCAAC 1478.  
 |||||  
 Db 20 CGCTGAGCCACGGGTCAAC 1

RESULT 292  
 ADO32702/c  
 ID ADO32702 standard; DNA; 20 BP.  
 XX  
 AC ADO32702;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 150.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.

XX Key Location/Qualifiers  
 FH modified\_base 1...20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PS Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 150; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4089 CTCCACTTCAAGTCTGTGGG 4108  
 |||||  
 Db 20 CTCCACTTCAAGTCTGTGGG 1

RESULT 293

ADO32751/c

ID ADO32751 standard; DNA; 20 BP.

XX

AC ADO32751;

XX

DT 12-AUG-2004 (first entry)

XX

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 199.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FH modified\_base 1...20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX WO200404181-A2.

XX

PD 27-MAY-2004.

XX

PF 13-NOV-2003; 2003WO-US036411.

XX

PR 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

PS Example 29; SEQ ID NO 199; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1678 CAAGCCATCATCTGATGTC 1697  
 Db 20 CAAGCCATCATCTGATGTC 1

RESULT 294  
 AD032840/c  
 ID AD032840 standard; DNA; 20 BP.  
 AC AD032840;  
 XX  
 XX 12-AUG-2004 (first entry)  
 DT  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 288.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.

XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5'-  
 FT methylcytidines"

XX WO200404181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF

XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 30; SEQ ID NO 288; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes,  
 CC obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3236 AACTCAAGCAGAGGTCGCA 3255  
 Db 20 AACTCAAGCAGAGGTCGCA 1

RESULT 295  
 AD033106  
 ID AD033106 standard; DNA; 20 BP.  
 XX  
 AC AD033106;  
 XX  
 XX 12-AUG-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 554.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX

OS Homo sapiens.  
 PN WO2004044181-A2.  
 XX 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 36; SEQ ID NO 554; 483pp; English.  
 PS The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular.  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 269 GCACCTCCGGAAGTACACAT 288  
 Db 1 GCACCTCCGGAAGTACACAT 20  
 RESULT 296  
 ADO33127  
 ID ADO33127 standard; DNA; 20 BP.  
 XX ADO33127;  
 AC ADO33127;  
 XX 12-AUG-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 575.  
 DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 XX antilipemic; anidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; Chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 OS WO2004044181-A2.  
 PN 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 36; SEQ ID NO 575; 483pp; English.  
 PS The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2949 ACATTACATTTGGTCTCTAC 2968  
 Db 1 ACATTACATTTGGTCTCTAC 20  
 RESULT 297  
 ADO33130  
 ID ADO33130 standard; DNA; 20 BP.  
 XX ADO33130;  
 AC ADO33130;  
 XX 12-AUG-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 575.  
 DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 XX antilipemic; anidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 578.  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytotatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 36; SEQ ID NO 578; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytotatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 3189 GAGTCCAGAGAGGACAG 3208  
 Db 1 GAGTCCAGAGAGGACAG 20  
 |||||  
 RESULT 298

AD033167  
 ID ADO33167 standard; DNA; 20 BP.  
 XX  
 AC ADO33167;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 615.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytotatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 36; SEQ ID NO 615; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytotatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 TCCACCGGACCTGCGGG 22  
 Db 1 TCCACCGGACCTGCGGG 20

RESULT 299  
 ADO33171  
 ID ADO33171 standard; DNA; 20 BP.  
 XX  
 AC ADO33171;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 619.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX  
 PS Example 36; SEQ ID NO 619; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the

CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.9e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 36 TCGGTTGCTGCGCTGAGGA 55  
 Db 1 TCGGTTGCTGCGCTGAGGA 20

RESULT 300  
 ADO33458/C  
 ID ADO33458 standard; RNA; 20 BP.  
 XX  
 AC ADO33458;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Phosphodiester double-stranded RNA targeted to human ApoB 7.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW phosphodiester backbone.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 XX modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphodiester backbone"  
 XX  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX  
 PS Example 60; Page 218; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the

CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC phosphodiester double-stranded RNA of the invention which is targeted to  
 CC human Apob RNA. This sequence is assigned a SEQ ID NO but does match that  
 CC given in the sequence listing.

XX SQ Sequence 20 BP; 6 A; 3 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3579 GACTCATCTGCTACAGCTTA 3598

Db 20 GACTCATCTGCTACAGCTTA 1

RESULT 301

AD032571/c

ID AD032571 standard; DNA; 20 BP.

XX AC AD032571;

XX DT 12-AUG-2004 (first entry)

XX DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 19.

XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

PN W0200404181-A2.

XX DT 27-MAY-2004.

XX PF 13-NOV-2003; 2003WO-US036411.

PR 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.

XX PA (ISTS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX

FT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX Example 15; SEQ ID NO 19; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob RNA.

XX SQ Sequence 20 BP; 0 A; 10 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 71 CAGGGCCGAGGCCGAGGC 90

Db 20 CAGGGCCGAGGCCGAGGC 1

RESULT 302

AD032577/c

ID AD032577 standard; DNA; 20 BP.

XX AC AD032577;

XX DT 12-AUG-2004 (first entry)

XX DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 25.

XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

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XX PN WO2004044181-A2.
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX PD impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX PF obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX PP phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX XX Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX PT syndrome.
XX PS Example 15; SEQ ID NO 25; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasodocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 716 GGGCAATGTGGCAACAGAAA 735
DB 20 GGGCAATGTGGCAACAGAAA 1
|||||
|||||

RESULT 303
AD032581/c
ID AD032581 standard; DNA; 20 BP.
AC
XX ADO32581;
XX
XX 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 29.
XX
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;

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KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX PT syndrome.
XX PS Example 15; SEQ ID NO 29; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasodocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1231 CACAGCTGATTGAGGTGTC 1250
DB 20 CACAGCTGATTGAGGTGTC 1
|||||
|||||

RESULT 304

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AD032587/c
ID  AD032587 standard; DNA; 20 BP.
XX
AC  AD032587;
XX
DT  12-AUG-2004 (first entry)
XX
DE  Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 35.
XX
KW  apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW  antilipaeamic; antidiabetic; anorectic; cardiac; vasotrophic; hypotensive;
KW  anabolic; eating disorder; cyostatic; endocrine; vasotrophic;
KW  neuroprotective; nootropic; lipid; cholesterol metabolism;
KW  hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW  von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW  sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW  anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW  impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW  obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW  phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS  Homo sapiens.
XX
XX
XX  Key      Location/Qualifiers
XX  modified_base 1..20
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX  WO200404181-A2.
XX
XX  27-MAY-2004.
XX
XX  13-NOV-2003; 2003WO-US036411.
XX
XX  13-NOV-2002; 2002US-0426234P.
XX  15-MAY-2003; 2003WO-US015493.
XX
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX  WPI; 2004-420321/39.
XX
XX  Antisense oligonucleotide compound that inhibits expression of mRNA
XX  encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX  diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX  syndrome.
XX
XX  Example 15; SEQ ID NO 35; 483pp; English.
XX
XX  The invention relates to a novel antisense compound where the compound
XX  hybridises to and inhibits expression of mRNA encoding human
XX  apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX  confluent HepG2 cells in culture at a concentration of 150 nM. The
XX  compound of the invention demonstrates cardiovascular.
XX  antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,
XX  vasotrophic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX  endocrine, vasotrophic, neuroprotective and nootropic activities and may
XX  be useful for inhibiting the expression of apolipoprotein B in cells or
XX  tissues in vivo in order to address a condition associated with abnormal
XX  lipid or cholesterol metabolism. The compound may be useful for
XX  decreasing circulating lipoprotein levels, triglyceride levels,
XX  cholesterol levels, lipid levels, fatty acid levels, acute phase
XX  reactants and chylomicrons and thus may be utilised during treatment of
XX  hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX  cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX  syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX  anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX  impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX  diabetes, obesity and atherosclerosis. The current sequence is that of an

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CC  antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC  targeted to human Apob RNA.
XX
XX  Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX  Query Match      0.1%; Score 20; DB 1; Length 20;
XX  Best Local Similarity 100.0%; Pred No. 4.8e+02;
XX  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX  QY  2496 CATGACCTCCAGCTCCTCTGGG 2515
XX      |||||
XX  Db  20 CATGACCTCCAGCTCCTCTGGG 1
XX
XX  RESULT 305
XX  ID  AD032676/c
XX  AC  AD032676 standard; DNA; 20 BP.
XX
XX  AC  AD032676;
XX
XX  DT  12-AUG-2004 (first entry)
XX
XX  DE  Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 124.
XX
XX  KW  apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX  antilipaeamic; antidiabetic; anorectic; cardiac; vasotrophic; hypotensive;
XX  anabolic; eating disorder; cyostatic; endocrine; vasotrophic;
XX  neuroprotective; nootropic; lipid; cholesterol metabolism;
XX  hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX  von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX  sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX  anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX  impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX  obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX  phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX  OS  Homo sapiens.
XX
XX  XX  Key      Location/Qualifiers
XX  modified_base 1..20
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX  WO200404181-A2.
XX
XX  27-MAY-2004.
XX
XX  13-NOV-2003; 2003WO-US036411.
XX
XX  13-NOV-2002; 2002US-0426234P.
XX  15-MAY-2003; 2003WO-US015493.
XX
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX  WPI; 2004-420321/39.
XX
XX  Antisense oligonucleotide compound that inhibits expression of mRNA
XX  encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX  diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX  syndrome.
XX
XX  Example 15; SEQ ID NO 35; 483pp; English.
XX
XX  The invention relates to a novel antisense compound where the compound
XX  hybridises to and inhibits expression of mRNA encoding human
XX  apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX  confluent HepG2 cells in culture at a concentration of 150 nM. The
XX  compound of the invention demonstrates cardiovascular.
XX  antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,
XX  vasotrophic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX  endocrine, vasotrophic, neuroprotective and nootropic activities and may
XX  be useful for inhibiting the expression of apolipoprotein B in cells or
XX  tissues in vivo in order to address a condition associated with abnormal
XX  lipid or cholesterol metabolism. The compound may be useful for
XX  decreasing circulating lipoprotein levels, triglyceride levels,
XX  cholesterol levels, lipid levels, fatty acid levels, acute phase
XX  reactants and chylomicrons and thus may be utilised during treatment of
XX  hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX  cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX  syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX  anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX  impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX  diabetes, obesity and atherosclerosis. The current sequence is that of an

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CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob RNA.  
 XX  
 SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 199 GCGCCAGGCGCGAAGAGGAA 218  
 DB 20 GCGCCAGGCGCGAAGAGGAA 1  
 RESULT 306  
 ADO32743/c  
 ID ADO32743 standard; DNA; 20 BP.  
 XX  
 AC ADO32743;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE  
 DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 191.  
 XX  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 15-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 PD 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 FT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 191; 483pp; English.  
 PS  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent Hep2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob RNA.  
 XX  
 SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 829 CCTGTGCAACTCTGATCAGC 848  
 DB 20 CCTGTGCAACTCTGATCAGC 1  
 RESULT 307  
 ADO32749/c  
 ID ADO32749 standard; DNA; 20 BP.  
 XX  
 AC ADO32749;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE  
 DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 197.  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 197; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1390 CCTCAGCAGCAGCTGCGA 1409  
 DB 20 CCTCAGCAGCAGCTGCGA 1  
 RESULT 308  
 ADO32758/c  
 ID ADO32758 standard; DNA; 20 BP.  
 XX  
 XX ADO32758;  
 AC  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 206.  
 DE  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 206; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2729 CAACATGCAGCTGAACCTGG 2748  
 DB 20 CAACATGCAGCTGAACCTGG 1

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RESULT 309
ADO32760/c
ID ADO32760 standard; DNA; 20 BP.
XX
XX
AC ADO32760;
XX
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 208.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-3p24; ss.
XX
XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 208; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX

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CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred.No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3059 CTCAGGCGCTTACTCCACG 3078
Db 20 CTCAGGCGCTTACTCCACG 1
XX
XX RESULT 310
XX ADO32763/c
XX ID ADO32763 standard; DNA; 20 BP.
XX
XX AC ADO32763;
XX
XX 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 211.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 211; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX

```

CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3289 ATCGGCAGAGTATGACCTTG 3308  
 |||||  
 Db 20 ATCGGCAGAGTATGACCTTG 1

RESULT 311  
 ADO32805/c  
 ID ADO32805 standard; DNA; 20 BP.  
 XX  
 AC ADO32805;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 253.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

XX  
 FN WO2000404181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 29; SEQ ID NO 253; 483bp; English.  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, an  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 CGGTTGCTGCGCTGAGGAG 56  
 |||||  
 Db 20 CGGTTGCTGCGCTGAGGAG 1

RESULT 312  
 ADO33068  
 ID ADO33068 standard; DNA; 20 BP.  
 XX  
 AC ADO33068;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 516.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.

XX  
 OS Homo sapiens.  
 XX  
 FN WO2000404181-A2.  
 XX  
 XX 27-MAY-2004.

```
XX PF 13-NOV-2003; 2003WO-US036411.
XX OS Homo sapiens.
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2003; 2002US-0426234P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX PS Antisense oligonucleotide compound that inhibits expression of mRNA
XX CC encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX CC syndrome.
XX PS Example 36; SEQ ID NO 516; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
XX CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a
XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX CC Sequence 20 BP; 6 A; 5 C; 9 G; 0 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 199 GCGCCAGGCGCCGAGAGGAA 218
Db 1 GCGCCAGGCGCCGAGAGGAA 20
RESULT 313
ID ADO331133 standard; DNA; 20 BP.
XX AC ADO331133;
XX DT 12-AUG-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 581.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;

KW antisense target.
XX Homo sapiens.
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2003; 2002US-0426234P.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX PS Antisense oligonucleotide compound that inhibits expression of mRNA
XX CC encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX CC syndrome.
XX PS Example 36; SEQ ID NO 581; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
XX CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a
XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX CC Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3579 GACTCATCTGCTACAGCTTA 3598
Db 1 GACTCATCTGCTACAGCTTA 20
RESULT 314
ID ADO33169
XX AC ADO33169 standard; DNA; 20 BP.
XX DT 12-AUG-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 617.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
```

KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
KW antisense target.  
XX  
OS Homo sapiens.  
XX  
PN WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
PR  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 36; SEQ ID NO 617; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, a  
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
XX Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 23 CTGAGTGCCCTTCGCGTTG 42  
|||||  
DB 1 CTGAGTGCCCTTCGCGTTG 20  
|||||  
RESULT 315  
AD033203  
ID AD033203 standard; DNA; 20 BP.  
XX  
XX AC AD033203;  
XX

DT 12-AUG-2004 (first entry)  
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 651.  
XX  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
KW antisense target.  
XX  
XX Homo sapiens.  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
PR  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 36; SEQ ID NO 651; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, a  
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3230 GTTTGTAACCTCAAGCAGAAG 3249  
|||||  
DB 1 GTTTGTAACCTCAAGCAGAAG 20  
|||||

RESULT 316  
 ADO33208  
 ID ADO33208 standard; DNA; 20 BP.  
 XX  
 AC ADO33208;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 656.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 656; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3240 CAAGCAGAGGTGCGAAGCA 3259  
 ||||||||||||||||||  
 Db 1 CAAGCAGAGGTGCGAAGCA 20  
 RESULT 317  
 ADO33431/c  
 ID ADO33431 standard; RNA; 20 BP.  
 XX  
 AC ADO33431;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Phosphodiester double-stranded RNA targeted to human ApoB - SEQ ID 879.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW phosphodiester backbone.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 60; SEQ ID NO 879; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC phosphodiester double-stranded RNA of the invention which is targeted to  
 CC human ApoB RNA.

XX SQ Sequence 20 BP; 5 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 426 AAAGAGGTGTATGCTTCAA 445  
 Db 20 AAAGAGGTGTATGCTTCAA 1

RESULT 318  
 ID ADO33452/c  
 ID ADO33452 standard; RNA; 20 BP.

XX AC ADO33452;

XX DT 12-AUG-2004 (first entry)

XX DE Phosphodiester double-stranded RNA targeted to human ApoB 1.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX KW phosphodiester backbone.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphodiester backbone"

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX PF 13-NOV-2003; 2003WO-US036411.

XX PR 13-NOV-2002; 2002US-0426234P.

XX PX 15-MAY-2003; 2003WO-US015493.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX DR WPI; 2004-420321/39.

XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX PS Example 60; Page 218; 483pp; English.

XX

CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC phosphodiester double-stranded RNA of the invention which is targeted to  
 CC human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that  
 CC given in the sequence listing.

XX SQ Sequence 20 BP; 2 A; 9 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 3249 GGTGCGAGCAGACTGAGGC 3268  
 Db 20 GGTGCGAGCAGACTGAGGC 1

RESULT 319

ADO32575/c

ID ADO32575 standard; DNA; 20 BP.

XX AC ADO32575;

XX DT 12-AUG-2004 (first entry)

XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 23.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methycytidines"

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX PF 13-NOV-2003; 2003WO-US036411.

XX



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PR 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
PA (ISIS-) ISIS PHARM INC.
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 15; SEQ ID NO 23; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 321 CCTGGGACTGCTGATTCAAG 340
Db |||||
20 CCTGGGACTGCTGATTCAAG 1

RESULT 320
AD032576/c
ID AD032576 standard; DNA; 20 BP.
XX
XX AD032576;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 24.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
OS

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XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 15; SEQ ID NO 24; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 451 AGGCAAGGCTTCTCTGAAG 470
Db |||||
20 AGGCAAGGCTTCTCTGAAG 1

RESULT 321
AD032576/c
ID AD032578 standard; DNA; 20 BP.
XX
XX AD032578;
XX
XX 12-AUG-2004 (first entry)
XX
XX
XX

```

Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 26.

apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing; phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

Homo sapiens.

Key Location/Qualifiers  
modified\_base 1..20  
/\*tag= a  
/mod\_base= OTHER  
/note= "OTHER = Phosphorothioate backbone, bases 1-5 and 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"

WO2004044181-A2.

27-MAY-2004.

13-NOV-2003; 2003WO-US036411.

13-NOV-2002; 2002US-0426234P.

15-MAY-2003; 2003WO-US015493.

(ISIS-) ISIS PHARM INC.

Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
WPI; 2004-420321/39.

Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

Example 15; SEQ ID NO 26; 483pp; English.

The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of an antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is targeted to human Apob RNA.

Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 911 CAAGGAGCAACCTCTTCC 930  
|||||  
Db 20 CAAGGAGCAACCTCTTCC 1

RESULT 322  
AD032593/C  
ID AD032593 standard; DNA; 20 BP.  
XX  
AC AD032593;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 41.

apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing; phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

Homo sapiens.

Key Location/Qualifiers  
modified\_base 1..20  
/\*tag= a  
/mod\_base= OTHER  
/note= "OTHER = Phosphorothioate backbone, bases 1-5 and 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"

WO2004044181-A2.

27-MAY-2004.

13-NOV-2003; 2003WO-US036411.

13-NOV-2002; 2002US-0426234P.

15-MAY-2003; 2003WO-US015493.

(ISIS-) ISIS PHARM INC.

Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
WPI; 2004-420321/39.

Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

Example 15; SEQ ID NO 41; 483pp; English.

The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3791 GACTTTCGGCAGCGTGGTT 3810  
 Db |||||  
 20 GACTTTCGGCAGCGTGGTT 1

RESULT 323

AD032595/C

ID AD032595 standard; DNA; 20 BP.

XX AD032595;

XX 12-AUG-2004 (first entry)

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 43.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX WO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.

XX 13-NOV-2002; 2002US-0426234P.

XX 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX Example 15; SEQ ID NO 43; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent Hep2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nontropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4281 CTTCGGGCTCGTTACCACAT 4300

Db |||||  
 20 CTTCGGGCTCGTTACCACAT 1

RESULT 324

AD032752/C

ID AD032752 standard; DNA; 20 BP.

AC AD032752;

XX 12-AUG-2004 (first entry)

XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 200.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX WO2004044181-A2.

XX 27-MAY-2004.

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PF 13-NOV-2003; 2003WO-US036411.
XX
XX
PR 13-NOV-2002; 2002US-0426234P.
PR 15-MAY-2003; 2003WO-US015493.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 200; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1699 AGAAGCTGCCATCCAGCT 1718
XX | | | | | | | | | | | | | | | | | |
XX 20 AGAAGCTGCCATCCAGCT 1
XX
XX RESULT 325
XX ADO32761/C
XX ID ADO32761 standard; DNA; 20 BP.
XX
XX AC ADO32761;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 209.
XX
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

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XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methycytidines"
XX
XX PN WO2004044181-A2.
XX
XX XX 27-MAY-2004.
XX
XX PF 13-NOV-2003; 2003WO-US036411.
XX
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 209; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3118 GGCACACCATAGAGCTG 3137
XX | | | | | | | | | | | | | | | | | |
XX 20 GGCACACCATAGAGCTG 1
XX
XX Db 20 GGCACACCATAGAGCTG 1
XX
XX RESULT 326
XX ADO32843/C
XX ID ADO32843 standard; DNA; 20 BP.
XX
XX AC ADO32843;
XX
XX SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

DT 12-AUG-2004 (first entry)  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 291.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO200404181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 30; SEQ ID NO 291; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular.  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.9e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3242 AGCAGAGGTCGAGGAGCAGA 3261  
 Db 20 AGCAGAGGTCGAGGAGCAGA 1  
 RESULT 327  
 ADO33118  
 ID ADO33118 standard; DNA; 20 BP.  
 XX  
 AC ADO33118;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 566.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 566; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular.  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1589 GATTCTGCGGCTCATTTGAA 1608  
 |||||  
 Db 1 GATTCTGCGGCTCATTTGAA 20  
 RESULT 328  
 ADO33173  
 ID ADO33173 standard; DNA; 20 BP.  
 XX  
 AC ADO33173;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 621.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 621; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, uraemia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 39 GTTGCTGCCGCTGAGGAGCC 58  
 |||||  
 Db 1 GTTGCTGCCGCTGAGGAGCC 20  
 RESULT 329  
 ADO33176  
 ID ADO33176 standard; DNA; 20 BP.  
 XX  
 AC ADO33176;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 624.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 624; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The

compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiatic, vasotropic, hypotensive, anabolic, eating disorder-related, cytotstatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a human apolipoprotein B (ApoB) antisense therapy target DNA of the invention. The human ApoB gene is located at chromosome 2p23-2p24.

Sequence 20 BP; 3 A; 8 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 120 CAGCTGGCGATGGACCCGCC 139  
Db 1 CAGCTGGCGATGGACCCGCC 20

RESULT 330  
ADO33459/c

ID ADO33459 standard; RNA; 20 BP.

XX ADO33459;

AC ADO33459;

DT 12-AUG-2004 (first entry)

XX Phosphodiester double-stranded RNA targeted to human ApoB 8.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipidemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytotstatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
KW phosphodiester backbone.

XX Homo sapiens.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphodiester backbone"

XX WO200404181-A2.

PN 27-MAY-2004.

PD 13-NOV-2003; 2003WO-US036411.

PF 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.

PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

DR WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

XX Example 60; Page 218; 483pp; English.

XX The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent Hep2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiatic, vasotropic, hypotensive, anabolic, eating disorder-related, cytotstatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a phosphodiester double-stranded RNA of the invention which is targeted to human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that given in the sequence listing.

XX Sequence 20 BP; 2 A; 9 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CACCGGACCTCGCGGGCTG 25  
Db 20 CACCGGACCTCGCGGGCTG 1

RESULT 331  
ADO32570/c

ID ADO32570 standard; DNA; 20 BP.

XX ADO32570;

XX 12-AUG-2004 (first entry)

XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 18.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipidemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytotstatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing; phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 XX methylcytidines"  
 XX  
 FN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 FT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 15; SEQ ID NO 18; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 21 GGCTGAGTGGCCCTTCGGT 40  
 |||||  
 Db 20 GGCTGAGTGGCCCTTCGGT 1  
 RESULT 332  
 ADO32596/c  
 ID ADO32596 standard; DNA; 20 BP.  
 XX  
 XX ADO32596;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 44.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 FT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 15; SEQ ID NO 44; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4391 ATGTGATGGGTCTCTACGCC 4410  
 |||||  
 Db 20 ATGTGATGGGTCTCTACGCC 1



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RESULT 333
ADO32678/c
ID ADO32678 standard; DNA; 20 BP.
XX
XX
AC ADO32678;
XX
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 126.
XX
XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
PN
XX
XX 27-MAY-2004.
PD
XX
XX 13-NOV-2003; 2003WO-US036411.
PF
XX
XX 13-NOV-2002; 2002US-0426234P.
PR
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
PI WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 29; SEQ ID NO 126; 483pp; English.
PS
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular.
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasoprotective, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC

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CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human Apob RNA.
XX
XX Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 359 CTGCAAGTTGAGCTGGAGG 378
Db 20 CTGCAAGTTGAGCTGGAGG 1
XX
XX RESULT 334
XX ADO32685/c
XX ID ADO32685 standard; DNA; 20 BP.
XX
XX AC ADO32685;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 133.
XX
XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
PN
XX
XX 27-MAY-2004.
PD
XX
XX 13-NOV-2003; 2003WO-US036411.
PF
XX
XX 13-NOV-2002; 2002US-0426234P.
PR
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
PI WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 29; SEQ ID NO 133; 483pp; English.
PS
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular.
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasoprotective, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC

```

CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, vasotropic, anabolic, eating disorder-related, cytotstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 799 CACTGTCTCATCAAGGC 818  
 Db 20 CACTGTCTCATCAAGGC 1  
 |||||

RESULT 335  
 ADO32691/C  
 ID ADO32691 standard; DNA; 20 BP.

AC ADO32691;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 139.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytotstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

PN WO2004044181-A2.  
 PD  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.

XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 29; SEQ ID NO 139; 483bp; English.  
 PS The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, vasotropic, anabolic, eating disorder-related, cytotstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1499 TACAGGGAGCCAGGAGCTGC 1518  
 Db 20 TACAGGGAGCCAGGAGCTGC 1  
 |||||

RESULT 336  
 ADO32741/C  
 ID ADO32741 standard; DNA; 20 BP.  
 XX  
 AC ADO32741;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 189.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytotstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p21-2p24; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a

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FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX
PN      WO2004044181-A2.
XX
PD      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 29; SEQ ID NO 189; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX      Query Match          0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred.No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      529 CCATTCAGAGGGAAGCAG 548
DB      20 CCATTCAGAGGGAAGCAG 1
XX
RESULT 337
AD032742/c
ID      AD032742 standard; DNA; 20 BP.
XX
XX      AD032742;
XX
XX      12-AUG-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 190.
XX
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX      antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

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KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; neurotropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS      Homo sapiens.
XX
XX      Key      Location/Qualifiers
XX      modified_base 1..20
XX      FT      /*tag= a
XX      FT      /mod_base= OTHER
XX      FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 29; SEQ ID NO 190; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX      Query Match          0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred.No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      709 CGAGGAGGCGCATGTGGCA 728
XX      |||||

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Db      20  CGAGGAGGGCAATGTGCCA 1
RESULT 338
ADO32746/c
ID      ADO32746 standard; DNA; 20 BP.
XX
XX
AC      ADO32746;
XX
XX      12-AUG-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 194.
XX
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW      antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS      Homo sapiens.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX
XX      WO200404181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 29; SEQ ID NO 194; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and nootropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

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CC      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC      impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 2 A; 3 C; 7 G; 8 T; 0 U; 0 Other;
SQ

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Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1059 GAGAGCACCAATCCACATC 1078
DB      20 GAGAGCACCAATCCACATC 1

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RESULT 339  
ADO32762/c  
ID ADO32762 standard; DNA; 20 BP.  
XX  
XX ADO32762;  
XX  
XX 12-AUG-2004 (first entry)  
XX  
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 210.  
XX  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified\_base 1..20
XX /\*tag= a
XX /mod\_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO200404181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 210; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound

CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3189 GAGCTCCAGAGAGACAG 3208  
 Db 20 GAGCTCCAGAGAGACAG 1  
 RESULT 340  
 ADO32799/c  
 ID ADO32799 standard; DNA; 20 BP.  
 XX  
 AC ADO32799;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 247.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 modified\_base 1..20  
 /tag= a  
 /mod\_base= OTHER  
 /note= OTHER = Phosphorothioate backbone, optionally 2'-  
 MOE wing bases, all cytidine residues are 5-  
 methylcytidines"  
 WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.  
 PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Claim 22; SEQ ID NO 247; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
 Db 20 GGTGCGAAGCAGACTGAGGC 1  
 RESULT 341  
 ADO32801/c  
 ID ADO32801 standard; DNA; 20 BP.  
 XX  
 AC ADO32801;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 249.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers

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FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
FT
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 249; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 2 A; 9 C; 7 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 6 CACCGGACCTGCGGGCTG 25
XX |||||||
XX Db 20 CACCGGACCTGCGGGCTG 1
XX
XX RESULT 342
XX ADO32802/c
XX ID ADO32802 standard; DNA; 20 BP.
XX
XX AC ADO32802;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 250.
XX

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KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; neurotropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens..
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 250; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 23 CTGAGTGCCCTTCTCGGTG 42
Db 20 CTGAGTGCCCTTCTCGGTG 1

RESULT 343
ID ADO32842/c
AC ADO32842;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 290.
XX
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PS 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
DR Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
PS Example 30; SEQ ID NO 290; 483pp; English.
XX
CC The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of

```

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```

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human Apob RNA.
XX
SQ Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3240 CAAGCAGAGGTGCGAAGCA 3259
Db 20 CAAGCAGAGGTGCGAAGCA 1

RESULT 344
ID ADO32847/c
AC ADO32847;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 295.
XX
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PS 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
DR Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
PS Example 30; SEQ ID NO 295; 483pp; English.

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```

XX CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,
CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX CC
SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3250 GTGCGAAGCAGACTGAGGCT 3269
Db 20 GTGCGAAGCAGACTGAGGCT 1

RESULT 345
ADO32852/c
ID ADO32852 standard; DNA; 20 BP.
XX
XX AC ADO32852;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 300.
XX
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX
XX PN WO200404181-A2.
XX
XX PD 27-MAY-2004.
XX
XX FX 13-NOV-2003; 2003WO-US036411.

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PR 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
PA (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX DR Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX PS Example 30; SEQ ID NO 300; 483pp; English.
XX
XX CC The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3260 GACTGAGGCTACCATGACAT 3279
Db 20 GACTGAGGCTACCATGACAT 1

RESULT 346
ADO33209
ID ADO33209 standard; DNA; 20 BP.
XX
XX AC ADO33209;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 657.
XX
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX
XX OS Homo sapiens.

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XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 657; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
XX anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3242 AGCAGAAGTGGCAGACGA 3261
XX |||||
XX Db 1 AGCAGAAGTGGCAGACGA 20
XX
XX RESULT 347
XX ADO33217
XX ID ADO33217 standard; DNA; 20 BP.
XX
XX AC ADO33217;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 665.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's disease; dementia;
XX diabetes; obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX
XX Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 665; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
XX anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3258 CAGACTGAGGTACCATGAC 3277
XX |||||
XX Db 1 CAGACTGAGGTACCATGAC 20
XX
XX RESULT 348
XX ADO32580/c
XX ID ADO32580 standard; DNA; 20 BP.
XX
XX AC ADO32580;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 28.

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XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisenase; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 15; SEQ ID NO 28; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1041 AAGATGGGCTCGCATTTGA 1060  
 DB 20 AAGATGGGCTCGCATTTGA 1  
 RESULT 349  
 ADO32592/c  
 ID ADO32592 standard; DNA; 20 BP.  
 XX  
 AC ADO32592;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 40.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisenase; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 15; SEQ ID NO 40; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3611 TTCCAAGAGGGTGGCATGCG 3630

Db 20 TTCCAAGAGGGTGGCATGCG 1

RESULT 350

ID ADO32755/c

AD ADO32755 standard; DNA; 20 BP.

XX ADO32755;

DT 12-AUG-2004 (first entry)

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 203.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX WO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.

XX 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.

PA (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

PS Example 29; SEQ ID NO 203; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent Hep2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nontropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCAATATCTTGAACTCAG 1938

Db 20 TGCCAATATCTTGAACTCAG 1

RESULT 351

ID ADO32766/c

AD ADO32766 standard; DNA; 20 BP.

XX ADO32766;

DT 12-AUG-2004 (first entry)

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 214.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX WO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.



XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 251.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

XX KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;

XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;

XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

XX KW von Gierke's disease; lipodystrophy; Cushing's syndrome;

XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

XX KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;

XX KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX FT modified\_base 1..20

XX FT /\*tag= a

XX FT /mod\_base= OTHER

XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and

XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-

XX FT methylcytidines"

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX XX 13-NOV-2003; 2003WO-US036411.

XX PF 13-NOV-2002; 2002US-0426234P.

XX PR 15-MAY-2003; 2003WO-US015493.

XX XX (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX DR WPI; 2004-420321/39.

XX XX Antisense oligonucleotide compound that inhibits expression of mRNA

XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

XX PT syndrome.

XX PS Example 29; SEQ ID NO 251; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound

XX CC hybridises to and inhibits expression of mRNA encoding human

XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The

XX CC compound of the invention demonstrates cardiovascular,

XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,

XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

XX CC endocrine, neuroprotective and nootropic activities and may

XX CC be useful for inhibiting the expression of apolipoprotein B in cells or

XX CC tissues in vivo in order to address a condition associated with abnormal

XX CC lipid or cholesterol metabolism. The compound may be useful for

XX CC decreasing circulating lipoprotein levels, triglyceride levels,

XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase

XX CC reactants and chylomicrons and thus may be utilised during treatment of

XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's

XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of an

XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an

XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is

XX CC targeted to human ApoB RNA.

XX SQ Sequence 20 BP; 5 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 35 CTCGGTTCTCCGCTGAGG 54

Db 20 CTCGGTTCTCCGCTGAGG 1

RESULT 354

AD033082

ID AD033082 standard; DNA; 20 BP.

XX AC AD033082;

XX DT 12-AUG-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 530.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

XX KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;

XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;

XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

XX KW von Gierke's disease; lipodystrophy; Cushing's syndrome;

XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

XX KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;

XX KW antisense target.

XX OS Homo sapiens.

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX XX 13-NOV-2003; 2003WO-US036411.

XX PF 13-NOV-2002; 2002US-0426234P.

XX PR 15-MAY-2003; 2003WO-US015493.

XX XX (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX DR WPI; 2004-420321/39.

XX XX Antisense oligonucleotide compound that inhibits expression of mRNA

XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

XX PT syndrome.

XX PS Example 36; SEQ ID NO 530; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound

XX CC hybridises to and inhibits expression of mRNA encoding human

XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The

XX CC compound of the invention demonstrates cardiovascular,

XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,

XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

XX CC endocrine, neuroprotective and nootropic activities and may

XX CC be useful for inhibiting the expression of apolipoprotein B in cells or

XX CC tissues in vivo in order to address a condition associated with abnormal

XX CC lipid or cholesterol metabolism. The compound may be useful for

XX CC decreasing circulating lipoprotein levels, triglyceride levels,

XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase

XX CC reactants and chylomicrons and thus may be utilised during treatment of

XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's

XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3919 AGAATGGGATGCCAGAC 3938  
 Db 1 AGAATGGGATGCCAGAC 20  
 RESULT 355  
 ADO33124  
 ID ADO33124 standard; DNA; 20 BP.  
 XX  
 AC ADO33124;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 572.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 XX  
 PN 27-MAY-2004.  
 PD  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 CC syndrome.  
 CC  
 XX Example 36; SEQ ID NO 572; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2189 CATCGAGATTGGCTTGGGAA 2208  
 Db 1 CATCGAGATTGGCTTGGGAA 20  
 RESULT 356  
 ADO33128  
 ID ADO33128 standard; DNA; 20 BP.  
 XX  
 AC ADO33128;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 576.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 XX  
 PN 27-MAY-2004.  
 PD  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 CC syndrome.  
 CC  
 XX Example 36; SEQ ID NO 576; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,

CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a human apolipoprotein B (ApoB) antisense therapy target DNA of the invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3059 CTCAGCGCTTACTCAACG 3078  
|||||  
DB 1 CTCAGCGCTTACTCAACG 20

RESULT 357  
AD033138  
ID AD033138 standard; DNA; 20 BP.  
AC AD033138;  
DT 12-AUG-2004 (first entry)  
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 586.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; Von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; antisense target.

XX Homo sapiens.  
XX WO2004044181-A2.  
XX 27-MAY-2004.  
XX 13-NOV-2003; 2003WO-US036411.  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX (ISIS-) ISIS PHARM INC.  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

PS Example 36; SEQ ID NO 586; 483pp; English.  
XX The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a human apolipoprotein B (ApoB) antisense therapy target DNA of the invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4660 CTGCGCGCTCAATGGAGAG 4679  
|||||  
DB 1 CTGCGCGCTCAATGGAGAG 20

RESULT 358  
AD033168  
ID AD033168 standard; DNA; 20 BP.  
AC AD033168;  
XX AD033168;  
DT 12-AUG-2004 (first entry)  
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 616.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; Von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; antisense target.

XX Homo sapiens.  
XX WO2004044181-A2.  
XX 27-MAY-2004.  
XX 13-NOV-2003; 2003WO-US036411.  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX (ISIS-) ISIS PHARM INC.  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

DR WPI; 2004-420321/39.  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 616; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 .SQ Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 6 CACCGGGACCTCGGGGGCTG 25  
 DB 1 CACCGGGACCTCGGGGGCTG 20  
 RESULT 359  
 AD033448  
 ID AD033448 standard; DNA; 20 BP.  
 XX  
 XX AD033448;  
 AC  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA 1.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX

PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Example 54; Page 205; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 .SQ Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3248 AGGTGCGAGCAGCAGCTGAGG 3267  
 DB 1 AGGTGCGAGCAGCAGCTGAGG 20  
 RESULT 360  
 AD032574/c  
 ID AD032574 standard; DNA; 20 BP.  
 XX  
 XX AD032574;  
 AC  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapper oligo targeted to human ApoB RNA - SEQ 22.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.



```

XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX WO2004044181-A2.
XX 27-MAY-2004.
XX 13-NOV-2003; 2003WO-US036411.
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 15; SEQ ID NO 22; 483pp; English.
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 181 TGCTGCTGCTGCTGCGGCG 200
XX Db |||||||
XX 20 TGCTGCTGCTGCTGCGGCG 1
XX
XX RESULT 361
XX ADO32688/c
XX ID ADO32688 standard; DNA; 20 BP.
XX AC ADO32688;
XX XX
XX DT 12-AUG-2004 (first entry)
XX XX

```

Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 136.

apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; neurotropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; Werner's syndrome; hepatoma; multiple myeloma; uraemia; anorexia nervosa; impotence; obstructive liver disease; Alzheimer's disease; dementia; diabetes; obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing; phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

Homo sapiens.

Key Location/Qualifiers  
modified\_base 1..20  
/tag= a  
/mod\_base= OTHER  
/note= "OTHER = Phosphorothioate backbone, bases 1-5 and 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"

WO2004044181-A2.  
27-MAY-2004.  
13-NOV-2003; 2003WO-US036411.  
13-NOV-2002; 2002US-0426234P.  
15-MAY-2003; 2003WO-US015493.  
(ISIS-) ISIS PHARM INC.  
Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
WPI; 2004-420321/39.

Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

Example 15; SEQ ID NO 22; 483pp; English.

The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and neurotropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of an antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is targeted to human ApoB RNA.

Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 4.8e+02; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGCGGCG 200  
Db |||||||  
20 TGCTGCTGCTGCTGCGGCG 1

RESULT 361  
ADO32688/c  
ID ADO32688 standard; DNA; 20 BP.  
AC ADO32688;  
XX  
DT 12-AUG-2004 (first entry)  
XX

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1279 AGTGTGGACACCTCAGTGC 1298  
 |||||  
 Db 20 AGTGTGGACACCTCAGTGC 1

RESULT 362  
 ADO32737/c  
 XX ADO32737 standard; DNA; 20 BP.  
 XX ADO32737;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 185.  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"  
 XX  
 FN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PS Example 29; SEQ ID NO 185; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of an  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 XX targeted to human Apob RNA.  
 SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 229 ATGTGACCCCTGCTGTGCCA 248  
 |||||  
 Db 20 ATGTGACCCCTGCTGTGCCA 1

RESULT 363  
 ADO32744/c  
 ID ADO32744 standard; DNA; 20 BP.  
 XX ADO32744;  
 AC ADO32744;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 192.  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"  
 XX  
 FN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PS Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 syndrome.

XX PS Example 29; SEQ ID NO 192; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound

CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

CC confluent HepG2 cells in culture at a concentration of 150 nM. The

CC compound of the invention demonstrates cardiovascular,

CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,

CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

CC endocrine, vasotropic, neuroprotective and neurotropic activities and may

CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal

CC lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

CC diabetes, obesity and atherosclerosis. The current sequence is that of an

CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is

CC targeted to human ApoB RNA.

XX SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 849 AGCAGCCAGTCTCTGTCAGTA 868

DB 20 AGCAGCCAGTCTCTGTCAGTA 1

RESULT 364

AD032844/C

ID AD032844 standard; DNA; 20 BP.

XX AC AD032844;

XX DT 12-AUG-2004 (first entry)

XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 292.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;

KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;

KW neuroprotective; neurotropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;

KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;

KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX OS Homo sapiens.

XX FH Key

FT modified\_base 1..20

FT Location/Qualifiers

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-

FT methylcytidines"

XX PN WO2004044181-A2.

XX XX 27-MAY-2004.

PF 13-NOV-2003; 2003WO-US036411.

XX PR 13-NOV-2002; 2002US-0426234P.

PR 15-MAY-2003; 2003WO-US015493.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX WPI; 2004-420321/39.

XX DR Antisense oligonucleotide compound that inhibits expression of mRNA

XX encoding human apolipoprotein B, useful for treating hyperlipidemia,

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

PT syndrome.

XX PS Example 30; SEQ ID NO 292; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound

CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

CC confluent HepG2 cells in culture at a concentration of 150 nM. The

CC compound of the invention demonstrates cardiovascular,

CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,

CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,

CC endocrine, vasotropic, neuroprotective and neurotropic activities and may

CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal

CC lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

CC diabetes, obesity and atherosclerosis. The current sequence is that of an

CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is

CC targeted to human ApoB RNA.

XX SQ Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3244 CAGAGGTGCGAAGCAGACT 3263

DB 20 CAGAGGTGCGAAGCAGACT 1

RESULT 365

AD032845/C

ID AD032845 standard; DNA; 20 BP.

XX AC AD032845;

XX DT 12-AUG-2004 (first entry)

XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 293.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;

KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;

KW neuroprotective; neurotropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;

KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;

KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

```

XX OS Homo sapiens.
XX FH
XX FT Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX PN
XX PD W02004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PF 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX DR
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX PT syndrome.
XX PS Example 30; SEQ ID NO 293; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypertensive, anabolic, eating disorder-related, cytosstatic,
XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity . 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3246 GAAGTGCGAAGCAGACTGA 3265
Db 20 GAAGTGCGAAGCAGACTGA 1
|||||

RESULT 366
AD032849/c
ID AD032849 standard; DNA; 20 BP.
XX AC
XX AC AD032849;

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DT 12-AUG-2004 (first entry)
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 297.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
XX neuroprotective; lipod; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX W02004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX DR
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX PT syndrome.
XX PS Example 30; SEQ ID NO 297; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypertensive, anabolic, eating disorder-related, cytosstatic,
XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

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```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3254 GAAGCAGACTGAGGCTACCA 3273
Db 20 GAAGCAGACTGAGGCTACCA 1

RESULT 367
AD032854/c
ID AD032854 standard; DNA; 20 BP.
XX
AC AD032854;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 302.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's disease; dementia;
KW diabetes; obesity and atherosclerosis. The current sequence is that of an
KW antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
KW targeted to human ApoB RNA.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT FT methylcytidines"
XX
PN WO2004044181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
PS Example 30; SEQ ID NO 302; 483pp; English.
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC

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CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3264 GAGGCTACCATGACATTCAA 3283
Db 20 GAGGCTACCATGACATTCAA 1

RESULT 368
AD033074
ID AD033074 standard; DNA; 20 BP.
XX
AC AD033074;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 522.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's disease; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
PN WO2004044181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
PS Example 36; SEQ ID NO 522; 483pp; English.
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

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CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC cardiovascular disorders, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovacular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX  
 SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1459 CGCTGAGCCACGCGGTCAAC 1478  
 |||||  
 Db 1 CGCTGAGCCACGCGGTCAAC 20

RESULT 369  
 ADO33080  
 ID ADO33080 standard; DNA; 20 BP.  
 AC ADO33080;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 528.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotrophic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.

XX Homo sapiens.  
 OS  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

PT syndrome.  
 XX  
 Example 36; SEQ ID NO 528; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovacular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX  
 SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3100 CCTACTATCGCTGACCGGG 3119  
 |||||  
 Db 1 CCTACTATCGCTGACCGGG 20

RESULT 370  
 ADO33105  
 ID ADO33105 standard; DNA; 20 BP.  
 AC ADO33105;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 553.

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotrophic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.

XX Homo sapiens.  
 OS  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.

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PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 36; SEQ ID NO 553; 483bp; English.
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 229 ATGTACGCTGGTGTCTCCA 248
DB 1 ATGTACGCTGGTGTCTCCA 20

RESULT 371
AD033123
ID AD033123 standard; DNA; 20 BP.
XX AC AD033123;
XX DT 12-AUG-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 571.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX OS Homo sapiens.
XX PN WO2004044181-A2.
XX XX
XX PD 27-MAY-2004.
XX XX

PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 36; SEQ ID NO 571; 483bp; English.
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCAATATCTTGAATCAG 1938
DB 1 TGCCAATATCTTGAATCAG 20

RESULT 372
AD032573/C
ID AD032573 standard; DNA; 20 BP.
XX AC AD032573;
XX DT 12-AUG-2004 (first entry)
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 21.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

```

```

XX OS Homo sapiens.
XX DE
XX FT
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX FT
XX PN WO2004044181-A2.
XX PN
XX XX
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX PR WPI; 2004-420321/39.
XX DR
XX XX
XX FT Antisense oligonucleotide compound that inhibits expression of mRNA
XX FT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX FT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX FT syndrome.
XX PS Example 15; SEQ ID NO 21; 483pp; English.
XX CC
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 5 A; 9 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGCGCTG 170
Db |||||||
20 TGCCTGGCGCTGCTGCGCTG 1

RESULT 373
ID AD032695/c
AD AD032695 standard; DNA; 20 BP.
XX AC
XX AC AD032695;
XX AC

```

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DT 12-AUG-2004 (first entry)
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 143.
XX
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX OS Homo sapiens.
XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX FT
XX PN WO2004044181-A2.
XX PN
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX PR WPI; 2004-420321/39.
XX DR
XX XX
XX FT Antisense oligonucleotide compound that inhibits expression of mRNA
XX FT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX FT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX FT syndrome.
XX PS Example 29; SEQ ID NO 143; 483pp; English.
XX CC
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

```



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Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2459 CCGCATCTTGGAGAGGAGC 2478
DB 20 CCGCATCTTGGAGAGGAGC 1

RESULT 374
ADO32739/c
ID ADO32739 standard; DNA; 20 BP.
XX
AC ADO32739;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 187.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 29; SEQ ID NO 187; 483pp; English.
XX
PS The invention relates to a novel antisense compound where the compound
PS hybridises to and inhibits expression of mRNA encoding human
PS apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
PS confluent HepG2 cells in culture at a concentration of 150 nM. The
PS compound of the invention demonstrates cardiovascular,
PS antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
PS vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
PS endocrine, vasotropic, neuroprotective and nootropic activities and may
PS be useful for inhibiting the expression of apolipoprotein B in cells or
PS tissues in vivo in order to address a condition associated with abnormal

```

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CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 389 CTGCAGCTTCATCCTGAAGA 408
DB 20 CTGCAGCTTCATCCTGAAGA 1

RESULT 375
ADO32748/c
ID ADO32748 standard; DNA; 20 BP.
XX
AC ADO32748;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 196.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

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PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 196; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1349 GATGATGTGTCTACCTACC 1368  
 DB 20 GATGATGTGTCTACCTACC 1  
 RESULT 376  
 ADO32750/c  
 ID ADO32750 standard; DNA; 20 BP.  
 AC ADO32750;  
 XX  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 198.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 PN  
 XX

PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 198; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1589 GATTCTCGGGTCATTGGAA 1608  
 DB 20 GATTCTCGGGTCATTGGAA 1  
 RESULT 377  
 ADO32759/c  
 ID ADO32759 standard; DNA; 20 BP.  
 XX  
 XX ADO32759;  
 AC  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 207.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW

KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.  
XX  
XX Example 29; SEQ ID NO 207; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
XX targeted to human ApoB RNA.  
XX  
SQ Sequence 20 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Fred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2949 ACATTACATTTGGTCTCTAC 2968  
|||||  
Db 20 ACATTACATTTGGTCTCTAC 1  
RESULT 378  
AD032800/c  
ID AD032800 standard; DNA; 20 BP.  
XX

AC AD032800;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 248.  
XX  
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.  
XX  
XX Example 29; SEQ ID NO 248; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
XX targeted to human ApoB RNA.  
XX

SQ Sequence 20 BP; 2 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 TCCACCGGGACCTGCGGG 22  
 DB 20 TCCACCGGGACCTGCGGG 1

RESULT 379  
 ID ADO33107 standard; DNA; 20 BP.  
 XX AC ADO33107;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 555.  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX OS Homo sapiens.  
 XX PN WO200404181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX PS Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX Example 36; SEQ ID NO 555; 483pp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX tissues in vivo in order to address a condition associated with abnormal  
 XX lipid or cholesterol metabolism. The compound may be useful for  
 XX decreasing circulating lipoprotein levels, triglyceride levels,  
 XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX reactants and chylomicrons and thus may be utilised during treatment of  
 XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 389 CTGCAGCTTCATCTGAAGA 408  
 DB 1 CTGCAGCTTCATCTGAAGA 20

RESULT 380  
 ID ADO33116 standard; DNA; 20 BP.  
 XX AC ADO33116;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 564.  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX OS Homo sapiens.  
 XX PN WO200404181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX PS Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX Example 36; SEQ ID NO 564; 483pp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1349 GATAGATGTGGTCACCTACC 1368  
 Db 1 GATAGATGTGGTCACCTACC 20  
 RESULT 381  
 ADO33139  
 ID ADO33139 standard; DNA; 20 BP.  
 XX  
 AC ADO33139;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 587.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cystostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 587; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent Hep2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cystostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4919 GCTGGTTCGATATATCAGG 4938  
 Db 1 GCTGGTTCGATATATCAGG 20  
 RESULT 382  
 ADO33432/c  
 ID ADO33432 standard; RNA; 20 BP.  
 XX  
 AC ADO33432;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Phosphodiester double-stranded RNA targeted to human ApoB - SEQ ID 880.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cystostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW phosphodiester backbone.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphodiester backbone"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX

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PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
DR WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 60; SEQ ID NO 880; 483pp; English.
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX phosphodiester double-stranded RNA of the invention which is targeted to
XX human ApoB RNA.
XX Sequence 20 BP; 3 A; 6 C; 5 G; 0 T; 6 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 3001 AGAACAGCGACTCTGGTCA 3020
DB 20 AGAACAGCGACTCTGGTCA 1
RESULT 383
AD032682/C
XX AD032682 standard; DNA; 20 BP.
XX AC AD032682;
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DT 12-AUG-2004 (first entry)
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 130.
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX Homo sapiens.
OS
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
/note= "OTHER = Phosphorothioate backbone, bases 1-5 and
16-20 2'-MOE wing bases, all cytidine residues are 5-
methylcytidines"
FT WO2004044181-A2.
XX PN
XX XX
XX PD 27-MAY-2004.
XX PF
XX 13-NOV-2003; 2003WO-US036411.
XX PR
XX 13-NOV-2003; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 29; SEQ ID NO 130; 483pp; English.
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 669 ACCGTGTATGGAAACTGCTC 688
DB 20 ACCGTGTATGGAAACTGCTC 1
RESULT 384
AD032683/C
XX AD032683 standard; DNA; 20 BP.
XX AC AD032683;
XX 12-AUG-2004 (first entry)
XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 131.
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;

```

neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; Von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing; phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

Homo sapiens.

Key Location/Qualifiers  
modified\_base 1..20  
/tag= a  
/mod\_base= OTHER  
/note= "OTHER = Phosphorothioate backbone, bases 1-5 and 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"

W02004044181-A2.  
27-MAY-2004.  
13-NOV-2003; 2003WO-US036411.  
13-NOV-2002; 2002US-0426234P.  
15-MAY-2003; 2003WO-US015493.  
(ISIS-) ISIS PHARM INC.  
Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
WPI; 2004-420321/39.  
Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.  
Example 29; SEQ ID NO 131; 483pp; English.  
The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of an antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is targeted to human ApoB RNA.

Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 699 ACCGTCACAGCAGGAGGG 718  
|||||  
20 ACCGTCACAGCAGGAGGG 1

## RESULT 305

ADO32698/C  
ID ADO32698 standard; DNA; 20 BP.XX  
AC ADO32698;XX  
DT 12-AUG-2004 (first entry)XX  
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 146.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
XX KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
XX KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
XX KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

OS Homo sapiens.

XX  
FH Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"

XX W02004044181-A2.

XX  
PD 27-MAY-2004.XX  
PF 13-NOV-2003; 2003WO-US036411.XX  
PR 13-NOV-2002; 2002US-0426234P.XX  
XX 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.

XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;XX  
XX WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.

XX  
XX Example 29; SEQ ID NO 146; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2919 AGACCAGTCAAGCTGCTCAG 2938  
 DB 20 AGACCAGTCAAGCTGCTCAG 1  
 |||||

RESULT 386  
 ADO32747/c  
 ID ADO32747 standard; DNA; 20 BP.

XX  
 AC ADO32747;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 195.

XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

XX  
 FN WO200404181-A2.  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.

XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 XX WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX  
 PS Example 29; SEQ ID NO 195; 483pp; English.

XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, a  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1199 CCTCAGTGATGAAGCAGCTCA 1218  
 DB 20 CCTCAGTGATGAAGCAGCTCA 1  
 |||||

RESULT 387  
 ADO32838/c  
 ID ADO32838 standard; DNA; 20 BP.

XX  
 AC ADO32838;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 286.

XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"

XX  
 FN WO200404181-A2.  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX



```

PA (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 30; SEQ ID NO 286; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosclastic,
CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3232 TTGTAACCTCAAGCAGAGGT 3251
DB 20 TTGTAACCTCAAGCAGAGGT 1
XX
RESULT 388
AD032855/C
ID AD032855 standard; DNA; 20 BP.
XX
XX AD032855;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 303.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosclastic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
FT

```

```

FT
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 30; SEQ ID NO 303; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosclastic,
CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3366 GGCTACCATGACATTCAAAT 3285
DB 20 GGCTACCATGACATTCAAAT 1
XX
RESULT 389
AD033066/C
ID AD033066 standard; DNA; 20 BP.
XX
XX AD033066;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 514.
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

```

antilipaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, optionally 2'-  
 FT MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 FT  
 FT  
 FT  
 FT  
 FN WO200404181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2003; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 35; SEQ ID NO 514; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 3254 GAAGCAGACTGAGGCTACCA 3273

|||||  
 20 GAAGCAGACTGAGGCTACCA 1  
 Db  
 RESULT 390  
 ADO33070  
 ID ADO33070 standard; DNA; 20 BP.  
 XX  
 AC ADO33070;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 518.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200404181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2003; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 36; SEQ ID NO 518; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 584 CATCTGAACATCAAGAGG 603  
 DB 1 CATCTGAACATCAAGAGG 20  
 RESULT 391  
 ADO33073  
 ID ADO33073 standard; DNA; 20 BP.  
 AC ADO33073;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 521.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 syndrome.  
 XX  
 PS Example 36; SEQ ID NO 521; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 hybridises to and inhibits expression of mRNA encoding human  
 apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 confluent HepG2 cells in culture at a concentration of 150 nM. The  
 compound of the invention demonstrates cardiovascular,  
 antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 cholesterol levels, lipid levels, fatty acid levels, acute phase  
 reactants and chylomicrons and thus may be utilised during treatment of  
 hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 869 CACACTGGACGCTAAGAGGA 888  
 DB 1 CACACTGGACGCTAAGAGGA 20  
 RESULT 392  
 ADO33081  
 ID ADO33081 standard; DNA; 20 BP.  
 AC ADO33081;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 529.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 syndrome.  
 XX  
 PS Example 36; SEQ ID NO 529; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 hybridises to and inhibits expression of mRNA encoding human  
 apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 confluent HepG2 cells in culture at a concentration of 150 nM. The  
 compound of the invention demonstrates cardiovascular,  
 antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 cholesterol levels, lipid levels, fatty acid levels, acute phase  
 reactants and chylomicrons and thus may be utilised during treatment of  
 hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3449 GGGCCACCTAAGTTGTGACA 3468  
 |||||  
 Db 1 GGGCCACCTAAGTTGTGACA 20

RESULT 393  
 ADO33108  
 ID ADO33108 standard; DNA; 20 BP.  
 AC ADO33108;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 556.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.  
 XX Homo sapiens.  
 XX WO2004044181-A2.  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 556; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 449 TGAGGGCAAGCCCTTGCTGA 468  
 |||||  
 Db 1 TGAGGGCAAGCCCTTGCTGA 20

RESULT 394  
 ADO33170  
 ID ADO33170 standard; DNA; 20 BP.  
 XX  
 AC ADO33170;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 618.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.  
 XX Homo sapiens.  
 XX WO2004044181-A2.  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX  
 PS Example 36; SEQ ID NO 619; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular.  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 35 CTCGGTTGCTGCGCTGAGG 54  
 Db 1 CTCGGTTGCTGCGCTGAGG 20  
 RESULT 395  
 ADO33172  
 ID ADO33172 standard; DNA; 20 BP.  
 XX  
 AC ADO33172;  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 620.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 620; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 37 CGGTGCTGCGCTGAGGAG 56  
 Db 1 CGGTGCTGCGCTGAGGAG 20  
 RESULT 396  
 ADO33456/c  
 ID ADO33456 standard; RNA; 20 BP.  
 XX  
 AC ADO33456;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Phosphodiester double-stranded RNA targeted to human ApoB 5.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nontropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW phosphodiester backbone.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a

```

FT FT /mod_base= OTHER
XX XX /note= "OTHER = Phosphodiester backbone"
PN PN
XX WO2004044181-A2.
XX 27-MAY-2004.
XX 13-NOV-2003; 2003WO-US036411.
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 60; Page 218; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX phosphodiester double-stranded RNA of the invention which is targeted to
XX human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that
XX given in the sequence listing.
XX
XX Sequence 20 BP; 5 A; 8 C; 3 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1179 CTGTTACTGAGCTGAGAGG 1198
XX |||||
XX DB 20 CTGTTACTGAGCTGAGAGG 1
XX
XX RESULT 397
XX ADO32684/C
XX ID ADO32684 standard; DNA; 20 BP.
XX
XX AC ADO32684;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 132.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;

```

```

KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 29; SEQ ID NO 132; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 756 GGGCAGTGTGATCGCTTCAA 775
XX |||||
XX DB 20 GGGCAGTGTGATCGCTTCAA 1

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CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2179 CAGCTGACCTCATCGAGATT 2198
Db 20 CAGCTGACCTCATCGAGATT 1
RESULT 399
ADO32765/c
ID ADO32765 standard; DNA; 20 BP.
AC ADO32765;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 213.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nontropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa, Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
WO2004044181-A2.
XX
27-MAY-2004.
XX
13-NOV-2003; 2003WO-US036411.
XX
13-NOV-2002; 2002US-0426234P.
XX
15-MAY-2003; 2003WO-US015493.
XX
(ISIS-) ISIS PHARM INC.
XX
Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
WPI; 2004-420321/39.
XX
Antisense oligonucleotide compound that inhibits expression of mRNA
encoding human apolipoprotein B, useful for treating hyperlipidemia,
diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
syndrome.
XX
Example 29; SEQ ID NO 141; 483pp; English.
XX
The invention relates to a novel antisense compound where the compound
hybridises to and inhibits expression of mRNA encoding human
apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
confluent HepG2 cells in culture at a concentration of 150 nM. The
compound of the invention demonstrates cardiovascular,
antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
endocrine, vasotropic, neuroprotective and nontropic activities and may
be useful for inhibiting the expression of apolipoprotein B in cells or
tissues in vivo in order to address a condition associated with abnormal
lipid or cholesterol metabolism. The compound may be useful for
decreasing circulating lipoprotein levels, triglyceride levels,
cholesterol levels, lipid levels, fatty acid levels, acute phase
reactants and chylomicrons and thus may be utilised during treatment of
hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

```

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3579 GACTCATCTGCTACAGCTTA 3598  
 Db 20 GACTCATCTGCTACAGCTTA 1  
 RESULT 400  
 ADO32837/c  
 ID ADO32837 standard; DNA; 20 BP.  
 XX  
 AC ADO32837;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 285.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO200404181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX

PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 DR WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 30; SEQ ID NO 285; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3230 GTTTGTAACCTCAGCAGAG 3249  
 Db 20 GTTTGTAACCTCAGCAGAG 1  
 RESULT 401  
 ADO32851/c  
 ID ADO32851 standard; DNA; 20 BP.  
 XX  
 AC ADO32851;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 299.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 Key Location/Qualifiers  
 FT modified\_base 1..20



```

FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
PN      WO2004044181-A2.
XX      27-MAY-2004.
XX      13-NOV-2003; 2003WO-US036411.
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX      (ISIS-) ISIS PHARM INC.
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX      Example 30; SEQ ID NO 299; 483pp; English.
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and nootropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX      Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
XX      Query Match 0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      3258 CAGACTGAGGCTACCATGAC 3277
Db      20 CAGACTGAGGCTACCATGAC 1
RESULT 402
AD032856/c
ID      AD032856 standard; DNA; 20 BP.
XX      AD032856;
XX      12-AUG-2004 (first entry)
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 304.
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

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KW      antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX      Homo sapiens.
XX      Key Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX      WO2004044181-A2.
XX      27-MAY-2004.
XX      13-NOV-2003; 2003WO-US036411.
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX      (ISIS-) ISIS PHARM INC.
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX      Example 30; SEQ ID NO 304; 483pp; English.
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and nootropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX      Sequence 20 BP; 6 A; 1 C; 5 G; 8 T; 0 U; 0 Other;
XX      Query Match 0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      3268 CTACCATGACATTCAATAT 3287

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Db          |||||||
10 CTACCATGACATTCATATAT 1

RESULT 403
ADO33078
ID ADO33078 standard; DNA; 20 BP.
XX
XX
AC ADO33078;
XX
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 526.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPT; 2004-420321/39.
XX
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 526; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent Hep2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
SQ Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2518 AGCTGCTTCTGATGGGTGCC 2537
|||||
DB 1 AGCTGCTTCTGATGGGTGCC 20
|||||

RESULT 404
ADO33083
ID ADO33083 standard; DNA; 20 BP.
XX
XX ADO33083;
XX
XX 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 531.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPT; 2004-420321/39.
XX
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 531; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent Hep2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX

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CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, CC impotence, obstructive liver disease, Alzheimer's disease, dementia, CC diabetes, obesity and atherosclerosis. The current sequence is that of a CC human apolipoprotein B (ApoB) antisense therapy target DNA of the CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4089 CTCACCTTCAAGTCTGTGGG 4108  
|||||

Db 1 CTCACCTTCAAGTCTGTGGG 20

RESULT 405

ID ADO33115 standard; DNA; 20 BP.

XX AC ADO33115;

XX DT 12-AUG-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 563.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.

XX OS Homo sapiens.

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX PF 13-NOV-2003; 2003WO-US036411.

XX PR 13-NOV-2002; 2002US-0426234P.

XX PR 15-MAY-2003; 2003WO-US015493.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX DR WPI; 2004-420321/39.

XX PT Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

XX PS Example 36; SEQ ID NO 563; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, CC cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, CC impotence, obstructive liver disease, Alzheimer's disease, dementia, CC diabetes, obesity and atherosclerosis. The current sequence is that of a CC human apolipoprotein B (ApoB) antisense therapy target DNA of the CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1199 CCTCAGTGATGAAGCAGTCA 1218  
|||||

Db 1 CCTCAGTGATGAAGCAGTCA 20

RESULT 406

ID ADO33125 standard; DNA; 20 BP.

XX AC ADO33125;

XX DT 12-AUG-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 573.

XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.

XX OS Homo sapiens.

XX PN WO2004044181-A2.

XX PD 27-MAY-2004.

XX PF 13-NOV-2003; 2003WO-US036411.

XX PR 13-NOV-2002; 2002US-0426234P.

XX PR 15-MAY-2003; 2003WO-US015493.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX DR WPI; 2004-420321/39.

XX PT Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

XX PS Example 36; SEQ ID NO 573; 483pp; English.

XX CC The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nototropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2649 GGAGCTGGATTACAGTTGCA 2668  
 Db 1 GGAGCTGGATTACAGTTGCA 20  
 RESULT 407  
 ADO33174  
 ID ADO33174 standard; DNA; 20 BP.  
 XX  
 AC ADO33174;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 622.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nototropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPT; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 622; 483pp; English.  
 XX  
 PS The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nototropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 2 A; 9 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 43 CTGCCGCTGAGAGCCGCC 62  
 Db 1 CTGCCGCTGAGAGCCGCC 20  
 RESULT 408  
 ADO33457/C  
 ID ADO33457 standard; RNA; 20 BP.  
 XX  
 AC ADO33457;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Phosphodiester double-stranded RNA targeted to human ApoB 6.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nototropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW phosphodiester backbone.  
 XX  
 OS Homo sapiens.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphodiester backbone"  
 XX  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX

PF 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
XX  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX  
XX WPI; 2004-420321/39.  
XX  
DR Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
PS Example 60; Page 218; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC phosphodiester double-stranded RNA of the invention which is targeted to  
CC human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that  
CC given in the sequence listing.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 5 G; 0 T; 4 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2331 GTGGACCACTTGGCTATAC 2350  
DB 20 GTGGACCACTTGGCTATAC 1  
RESULT 409  
ADO32569/c  
ID ADO32569 standard; DNA; 20 BP.  
XX  
AC ADO32569;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 17.  
XX  
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;

KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
FH Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
XX WO200404181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
XX  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX  
XX WPI; 2004-420321/39.  
XX  
DR Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
PS Example 15; SEQ ID NO 17; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human ApoB RNA.  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ATTTCCACCGGACCTGGCG 20  
DB 20 ATTTCCACCGGACCTGGCG 1  
RESULT 410  
ADO32582/c  
ID ADO32582 standard; DNA; 20 BP.  
XX  
AC ADO32582;

XX 12-AUG-2004 (first entry)  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApOB RNA - SEQ 30.  
 XX  
 XX apolipoprotein B; ApOB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 FT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 15; SEQ ID NO 30; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApOB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApOB RNA.  
 XX  
 XX Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1361 CACCTACCTGGTGGCCCTGA 1380  
 Db 20 CACCTACCTGGTGGCCCTGA 1  
 RESULT 411  
 ADO32681/c  
 ID ADO32681 standard; DNA; 20 BP.  
 XX ADO32681;  
 AC  
 XX 12-AUG-2004 (first entry)  
 XX  
 XX Antisense 2'-MOE gapmer oligo targeted to human ApOB RNA - SEQ 129.  
 KW apolipoprotein B; ApOB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 FT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 129; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApOB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 584 CATCTGGAACATCAAGAGGG 603  
 Db 20 CATCTGGAACATCAAGAGGG 1  
 RESULT 412  
 ADO32699/C  
 ID ADO32699 standard; DNA; 20 BP.  
 XX  
 AC ADO32699;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 147.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nototropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT

PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 29; SEQ ID NO 147; 483pp; English.  
 CC  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nototropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3100 CCTACTATCCCTGACCGGG 3119  
 Db 20 CCTACTATCCCTGACCGGG 1  
 RESULT 413  
 ADO32701/C  
 ID ADO32701 standard; DNA; 20 BP.  
 XX  
 AC ADO32701;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 149.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nototropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.

XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX XX 13-NOV-2002; 2002US-0426234P.  
 PR PR 15-MAY-2003; 2003WO-US015493.  
 XX XX (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX PS Example 29; SEQ ID NO 149; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 XX endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX tissues in vivo in order to address a condition associated with abnormal  
 XX lipid or cholesterol metabolism. The compound may be useful for  
 XX decreasing circulating lipoprotein levels, triglyceride levels,  
 XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX reactants and chylomicrons and thus may be utilised during treatment of  
 XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 XX syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 XX anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
 XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 XX targeted to human ApoB RNA.  
 XX SQ Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3919 AGACATGGGATGCCAGAC 3938  
 Db 20 AGACATGGGATGCCAGAC 1  
 RESULT 414  
 AD032738/c  
 ID AD032738 standard; DNA; 20 BP.  
 XX AC AD032738;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 186.  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 OS Homo sapiens.  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX WO2004044181-A2.  
 PN 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX PS Example 29; SEQ ID NO 186; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 XX endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX tissues in vivo in order to address a condition associated with abnormal  
 XX lipid or cholesterol metabolism. The compound may be useful for  
 XX decreasing circulating lipoprotein levels, triglyceride levels,  
 XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX reactants and chylomicrons and thus may be utilised during treatment of  
 XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 XX syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 XX anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
 XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 XX targeted to human ApoB RNA.  
 XX SQ Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 269 GCACCTCCGGAAGTACAT 288  
 Db 20 GCACCTCCGGAAGTACAT 1  
 RESULT 415  
 AD032770/c  
 ID AD032770 standard; DNA; 20 BP.



XX ADO32770;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 218.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 DR WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 218; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4660 CTGGCCGGCTCAATGGAGAG 4679  
 Db 20 CTGGCCGGCTCAATGGAGAG 1  
 RESULT 416  
 ADO32771/c  
 ID ADO32771 standard; DNA; 20 BP.  
 XX  
 AC ADO32771;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 219.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 DR WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 219; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX  
 SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4919 GCTGGTTCATATCAGG 4938  
 DB 20 GCTGGTTCATATCAGG 1

RESULT 417  
 ADO33072  
 ID ADO33072 standard; DNA; 20 BP.  
 XX AC ADO33072;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 520.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.

XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 520; 483pp; English.  
 XX

CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX  
 SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 799 CACTTGCTCTCATCAAGGC 818  
 DB 1 CACTTGCTCTCATCAAGGC 20

RESULT 418  
 ADO33075  
 ID ADO33075 standard; DNA; 20 BP.  
 XX AC ADO33075;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 523.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.

XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 DR  
 XX

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PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 36; SEQ ID NO 523; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1859 TGTCCAAATTCACCATGGG 1878
Db 1 TGTCCAAATTCACCATGGG 20
XX
RESULT 419
AD033079
ID AD033079 standard; DNA; 20 BP.
XX
XX AD033079;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 527.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX
XX Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2003; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 527; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2789 GGGCATCATCATTCGGGACT 2808
Db 1 GGGCATCATCATTCGGGACT 20
XX
RESULT 420
AD033122
ID AD033122 standard; DNA; 20 BP.
XX
XX AD033122;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 570.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX
XX Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2003; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX

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XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX PS Example 36; SEQ ID NO 570; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX SQ Sequence 20 BP; 6 A; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1829 GAGTCCTTTCACAGGCAGATA 1848  
 DB 1 GAGTCCTTTCACAGGCAGATA 20  
 |||||  
 RESULT 421  
 AD033136  
 ID AD033136 standard; DNA; 20 BP.  
 XX AC AD033136;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 584.  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.  
 XX OS Homo sapiens.  
 XX PN WO2004044181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX PS Example 36; SEQ ID NO 584; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4299 ATGAAGGCTGACTCTGTGGT 4318  
 DB 1 ATGAAGGCTGACTCTGTGGT 20  
 |||||  
 RESULT 422  
 AD033214  
 ID AD033214 standard; DNA; 20 BP.  
 XX AC AD033214;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 662.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.  
XX Homo sapiens.  
XX OS  
XX PN WO2004044181-A2.  
XX PD 27-MAY-2004.  
XX PF 13-NOV-2003; 2003WO-US036411.  
XX PR 13-NOV-2002; 2002US-0426234P.  
XX PR 15-MAY-2003; 2003WO-US015493.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX DR  
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX Example 36; SEQ ID NO 662; 483pp; English.  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3252 GCGAAGCAGACTGAGCTAC 3271  
Db 1 GCGAAGCAGACTGAGCTAC 20  
|||||  
RESULT 423  
ADO33215  
ID ADO33215 standard; DNA; 20 BP.  
XX

AC ADO33215;  
XX 12-AUG-2004 (first entry)  
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 663.  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.  
XX Homo sapiens.  
XX OS  
XX PN WO2004044181-A2.  
XX PD 27-MAY-2004.  
XX PF 13-NOV-2003; 2003WO-US036411.  
XX PR 13-NOV-2002; 2002US-0426234P.  
XX PR 15-MAY-2003; 2003WO-US015493.  
XX PA (ISIS-) ISIS PHARM INC.  
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX DR  
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX Example 36; SEQ ID NO 663; 483pp; English.  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3254 GAGCAGACTGAGCTACCA 3273  
|||||

Db 1 GAAGCAGACTGAGGCTACCA 20

RESULT 424

ADO33221

ID ADO33221 standard; DNA; 20 BP.

AC ADO33221;

XX

DT 12-AUG-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 669.

XX

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; human; chromosome 2p23-2p24; ds; antisense target.

XX

OS Homo sapiens.

XX

PN WO2004044181-A2.

XX

PD 27-MAY-2004.

XX

PF 13-NOV-2003; 2003WO-US036411.

XX

PR 13-NOV-2002; 2002US-0426234P.

XX

PR 15-MAY-2003; 2003WO-US015493.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX

XX WPI; 2004-420321/39.

DR

XX

XX Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

PT

PT

XX

PS Example 36; SEQ ID NO 669; 483pp; English.

XX

XX The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a human apolipoprotein B (ApoB) antisense therapy target DNA of the invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX

XX Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

XX

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e-02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3266 GGCTACCATGACATTCAAAT 3285

Db 1 GGCTACCATGACATTCAAAT 20

RESULT 425

ADO33460/C

ID ADO33460 standard; RNA; 20 BP.

XX

XX ADO33460;

XX

DT 12-AUG-2004 (first entry)

XX

DE Phosphodiester double-stranded RNA targeted to human ApoB 9.

XX

KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic; antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive; anabolic; eating disorder; cytostatic; endocrine; vasotropic; neuroprotective; nootropic; lipid; cholesterol metabolism; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; von Gierke's disease; lipodystrophy; Cushing's syndrome; sexual ateliotic dwarfism; hyperthyroidism; hypertension; anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia; impotence; obstructive liver disease; Alzheimer's; dementia; diabetes; obesity; atherosclerosis; human; chromosome 2p23-2p24; ds; phosphodiester backbone.

XX

OS Homo sapiens.

XX

PH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphodiester backbone"

XX

XX WO2004044181-A2.

XX

PD 27-MAY-2004.

XX

XX 13-NOV-2003; 2003WO-US036411.

XX

XX 13-NOV-2002; 2002US-0426234P.

XX

XX 15-MAY-2003; 2003WO-US015493.

XX

XX (ISIS-) ISIS PHARM INC.

XX

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX

XX WPI; 2004-420321/39.

DR

XX

XX Antisense oligonucleotide compound that inhibits expression of mRNA encoding human apolipoprotein B, useful for treating hyperlipidemia, diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's syndrome.

PT

PT

XX

PS Example 60; Page 218; 483pp; English.

XX

XX The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant, vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic, endocrine, vasotropic, neuroprotective and nootropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC phosphodiester double-stranded RNA of the invention which is targeted to  
 CC human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that  
 CC given in the sequence listing.

SQ Sequence 20 BP; 2 A; 7 C; 7 G; 0 T; 4 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 116 ACCGAGCTGGCGATGGACC 135  
 |||||  
 Db 20 ACCGAGCTGGCGATGGACC 1

RESULT 426

ADO32594/C

ID ADO32594 standard; DNA; 20 BP.

XX

AC ADO32594;

XX

DT 12-AUG-2004 (first entry)

XX

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 42.

XX

KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

OS

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX

PN WO2004044181-A2.

XX

XX 27-MAY-2004.

PD

XX 13-NOV-2003; 2003WO-US036411.

XX

PR 13-NOV-2003; 2002US-0426234P.

XX

PR 15-MAY-2003; 2003WO-US015493.

XX

PA (ISIS-) ISIS PHARM INC.

XX

PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX

XX WPI; 2004-42021/39.

XX

PT Antisense oligonucleotide compound that inhibits expression of mRNA

PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX

PS Example 15; SEQ ID NO 42; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

XX

SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3841 TTTCAGAGGCATCTCGGAGT 3860

Db 20 TTTCAGAGGCATCTCGGAGT 1

RESULT 427

ADO32686/C

ID ADO32686 standard; DNA; 20 BP.

XX

AC ADO32686;

XX

DT 12-AUG-2004 (first entry)

XX

DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 134.

XX

KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX Homo sapiens.

OS

XX Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"

XX

PN WO2004044181-A2.

PD 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 29; SEQ ID NO 134; 483pp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX SEQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 869 CACACTGGACGCTAAGAGGA 888  
 Db 20 CACACTGGACGCTAAGAGGA 1  
 RESULT 428  
 ADO32689/c  
 ID ADO32689 standard; DNA; 20 BP.  
 XX ADO32689;  
 XX 12-AUG-2004 (first entry)  
 DT Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 137.  
 DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 XX antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 OS Homo sapiens.  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX WO2004044181-A2.  
 PN 27-MAY-2004.  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 29; SEQ ID NO 137; 483pp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX SEQ Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1419 AACATGGCGAGGATCAGCG 1438  
 Db 20 AACATGGCGAGGATCAGCG 1  
 RESULT 429  
 ADO32808/c  
 ID ADO32808 standard; DNA; 20 BP.  
 XX



AC ADO32808;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 256.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methycytidines"  
 XX  
 XX WO2004044181-A2.  
 PN  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 256; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 116 ACCGCAGCTGGCGATGGACC 135  
 Db 20 ACCGCAGCTGGCGATGGACC 1  
 RESULT 430  
 ADO33076  
 ID ADO33076 standard; DNA; 20 BP.  
 XX  
 AC ADO33076;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 524.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 524; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2179 CAGCTGACCTCATCGAGATT 2198  
 |||||  
 Db 1 CAGCTGACCTCATCGAGATT 20  
 RESULT 431  
 ADO33120  
 ID ADO33120 standard; DNA; 20 BP.  
 XX  
 AC ADO33120;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 568.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX WO2004044181-A2.  
 FN  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 568; 483pp; English.  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1699 AGAAAGCTGCATCCAGGCT 1718  
 |||||  
 Db 1 AGAAAGCTGCATCCAGGCT 20  
 RESULT 432  
 ADO33132  
 ID ADO33132 standard; DNA; 20 BP.  
 XX  
 AC ADO33132;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 580.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX WO2004044181-A2.  
 FN  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 580; 483pp; English.  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human

```

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of a
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3488 CAAAGGCTGTTATTCATAC 3507
DB 1 CAAAGGCTGTTATTCATAC 20

RESULT 433
ADO33455/C
ID ADO33455 standard; RNA; 20 BP.
XX ADO33455;
XX
XX
XX 12-AUG-2004 (first entry)
XX
XX Phosphodiester double-stranded RNA targeted to human ApoB 4.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX phosphodiester backbone.
XX
XX Homo sapiens.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphodiester backbone"
XX
XX WO2004044181-A2.
XX
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX

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PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX Example 60; Page 218; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,
XX anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human ApoB RNA. This sequence is assigned a SEQ ID NO but does match that
XX given in the sequence listing.
XX
XX Sequence 20 BP; 5 A; 5 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 569 ACCGTGTATGGAAACTGCTC 688
DB 20 ACCGTGTATGGAAACTGCTC 1
XX
XX
XX RESULT 434
XX ADO32584/C
XX ID ADO32584 standard; DNA; 20 BP.
XX
XX ADO32584;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 32.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a

```

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FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
FT
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 15; SEQ ID NO 32; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotrophic, hypotensive, anabolic, eating disorder-related, cyrostatic,
XX      endocrine, vasotropic, neuroprotective and nototropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX      Query Match      0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy      1611 ATGGGCCAAACCATGGAGCA 1630
Db      20 ATGGGCCAAACCATGGAGCA 1
XX
XX      RESULT 435
XX      ADO32687/c
XX      ID ADO32687 standard; DNA; 20 BP.
XX
XX      AC ADO32687;
XX
XX      12-AUG-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 135.
XX
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX      antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

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KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nototropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS      Homo sapiens.
XX
XX      Key      Location/Qualifiers
XX      modified_base 1..20
XX      /*tag= a
XX      /mod_base= OTHER
XX      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX      16-20 2'-MOE wing bases, all cytidine residues are 5-
XX      methylcytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 29; SEQ ID NO 135; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX      vasotrophic, hypotensive, anabolic, eating disorder-related, cyrostatic,
XX      endocrine, vasotropic, neuroprotective and nototropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX      diabetes, obesity and atherosclerosis. The current sequence is that of an
XX      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX      Query Match      0.1%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy      1179 CTGGTTACTGAGCTGAGAGG 1198

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Db      20 CTGGTTACTGAGCTGAGAGG 1
RESULT 436
ADO32697/c
ID      ADO32697 standard; DNA; 20 BP.
XX
XX
AC      ADO32697;
XX
XX      12-AUG-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 145.
XX
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW      antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX      Homo sapiens.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methycytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX
XX      Example 29; SEQ ID NO 145; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
CC      hybridises to and inhibits expression of mRNA encoding human
CC      apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC      confluent HepG2 cells in culture at a concentration of 150 nM. The
CC      compound of the invention demonstrates cardiovascular,
CC      antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
CC      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC      endocrine, neuroprotective and nootropic activities and may
CC      be useful for inhibiting the expression of apolipoprotein B in cells or
CC      tissues in vivo in order to address a condition associated with abnormal
CC      lipid or cholesterol metabolism. The compound may be useful for
CC      decreasing circulating lipoprotein levels, triglyceride levels,
CC      cholesterol levels, lipid levels, fatty acid levels, acute phase
CC      reactants and chylomicrons and thus may be utilised during treatment of
CC      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC      cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

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CC      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC      impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to human ApoB RNA.
XX
XX      Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      2789 GGGCATCATCATTCGGACT 2808
Db      20 GGGCATCATCATTCGGACT 1
RESULT 437
ADO32703/c
ID      ADO32703 standard; DNA; 20 BP.
XX
XX      AC      ADO32703;
XX
XX      12-AUG-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 151.
XX
XX      apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW      antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; nootropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX      Homo sapiens.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methycytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX
XX      Example 29; SEQ ID NO 151; 483pp; English.
XX
XX      The invention relates to a novel antisense compound where the compound

```

CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4579 TCAAGATTGATGGCAGTTC 4598  
 Db 20 TCAAGATTGATGGCAGTTC 1  
 RESULT 438  
 ID ADO32804/c  
 ID ADO32804 standard; DNA; 20 BP.  
 XX  
 AC ADO32804;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 252.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 FN WO200404181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 PR 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemondis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 252; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidaemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 36 TCGGTGCTCCGCTGAGGA 55  
 Db 20 TCGGTGCTCCGCTGAGGA 1  
 RESULT 439  
 ID ADO32839/c  
 ID ADO32839 standard; DNA; 20 BP.  
 XX  
 AC ADO32839;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 287.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH



```

XX AC ADO33114;
XX DT 12-AUG-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 562.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX KW antisense target.
XX OS Homo sapiens.
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX DR WPI; 2004-420321/39.
XX PS Antisense oligonucleotide compound that inhibits expression of mRNA
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a
XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX SQ Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1059 GAGAGCACCAATCCACATC 1078.

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Db 1 GAGAGCACCAATCCACATC 20
RESULT 442
ADO33175
ID ADO33175 standard; DNA; 20 BP.
XX AC ADO33175;
XX DT 12-AUG-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 623.
XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX KW antisense target.
XX OS Homo sapiens.
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX DR WPI; 2004-420321/39.
XX PS Antisense oligonucleotide compound that inhibits expression of mRNA
XX CC encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX CC syndrome.
XX PS Example 36; SEQ ID NO 623; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a
XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX

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SQ Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 116 ACCGCAGCTGGCGATGACC 135  
 |||||  
 Db 1 ACCGCAGCTGGCGATGACC 20

RESULT 443  
 ADO33205  
 ID ADO33205 standard; DNA; 20 BP.  
 XX  
 AC ADO33205;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 653.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 653; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of a  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3234 GTAACCTCAAGCAGAGGTGC 3253  
 |||||  
 Db 1 GTAACCTCAAGCAGAGGTGC 20

RESULT 444  
 ADO33210  
 ID ADO33210 standard; DNA; 20 BP.  
 XX  
 AC ADO33210;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 658.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 658; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3244 CAGAAGGTGCGAAGCAGACT 3263  
 |||||  
 DB 1 CAGAAGGTGCGAAGCAGACT 20  
 RESULT 445  
 ADO33218  
 ID ADO33218 standard; DNA; 20 BP.  
 XX  
 AC ADO33218;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 666.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; noctropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 666; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and apolipoprotein B in cells or  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3260 GACTGAGGCTACCATGACAT 3279  
 |||||  
 DB 1 GACTGAGGCTACCATGACAT 20  
 RESULT 446  
 ADO33220  
 ID ADO33220 standard; DNA; 20 BP.  
 XX  
 AC ADO33220;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 668.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; noctropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 PS Example 36; SEQ ID NO 668; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 QY Query Match 0.1%; Score 20; DB 1; Length 20;  
 DB Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Mismatches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3264 GAGGCTACCATGACATTCAA 3283  
 DB 1 GAGGCTACCATGACATTCAA 20  
 RESULT 447  
 ID ADO33248  
 ID ADO33248 standard; DNA; 20 BP.  
 AC ADO33248;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 696.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 PD 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 696; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 QY Query Match 0.1%; Score 20; DB 1; Length 20;  
 DB Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Mismatches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3254 GAACGACACTGAGGCTACCA 3273  
 DB 1 GAACGACACTGAGGCTACCA 20  
 RESULT 448  
 ID ADO32579/C  
 ID ADO32579 standard; DNA; 20 BP.  
 AC ADO32579;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 27.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 XX modified\_base 1..20  
 XX /\*tag= a



Db 20 GTCAGTTCCTGATGGTGC 1

RESULT 450  
ADO32745/c  
ID ADO32745 standard; DNA; 20 BP.  
XX  
AC ADO32745;  
XX  
12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 193.  
XX  
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotrophic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antiseize; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
WO2004044181-A2.  
XX  
PD 27-MAY-2004.  
XX  
PF 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2003; 2002US-0426234P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
PT Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
PS Example 29; SEQ ID NO 193; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
XX vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
XX endocrine, vasotrophic, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human Apob RNA.  
XX  
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.9e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 889 AGCATGTGGCAGAGCCATC 908  
Db 20 AGCATGTGGCAGAGCCATC 1  
RESULT 451  
ADO32754/c  
ID ADO32754 standard; DNA; 20 BP.  
XX  
AC ADO32754;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 202.  
XX  
KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotrophic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antiseize; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
WO2004044181-A2.  
XX  
PD 27-MAY-2004.  
XX  
PF 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2003; 2002US-0426234P.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
PT Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
PS Example 29; SEQ ID NO 202; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound

CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasoprotective, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1829 GAGTCCTTCACAGGAGATA 1848  
 DB |||||  
 20 GAGTCCTTCACAGGAGATA 1  
 RESULT 452  
 ADO32756/c  
 ID ADO32756 standard; DNA; 20 BP.  
 XX  
 AC ADO32756;  
 XX  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 204.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO200404181-A2.  
 XX  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PP  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX  
 XX Example 29; SEQ ID NO 204; 483pp; English.  
 XX  
 XX The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX compound of the invention demonstrates cardiovascular,  
 XX antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 XX endocrine, vasoprotective, neuroprotective and neurotropic activities and may  
 XX be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX tissues in vivo in order to address a condition associated with abnormal  
 XX lipid or cholesterol metabolism. The compound may be useful for  
 XX decreasing circulating lipoprotein levels, triglyceride levels,  
 XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX reactants and chylomicrons and thus may be utilised during treatment of  
 XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 XX impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX diabetes, obesity and atherosclerosis. The current sequence is that of an  
 XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 XX targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2189 CATCGAGATTGGCTTGAAG 2208  
 DB |||||  
 20 CATCGAGATTGGCTTGAAG 1  
 RESULT 453  
 ADO32806/c  
 ID ADO32806 standard; DNA; 20 BP.  
 XX  
 AC ADO32806;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 254.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 FH

```

FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 254; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 39 GTTGCTGCGCTGAGGAGCC 58
Db 20 GTTGCTGCGCTGAGGAGCC 1

RESULT 454
ADO32807/C
ID ADO32807 standard; DNA; 20 BP.
XX
XX ADO32807;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 255.
XX

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KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 255; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Oy 43 CTGCGCGTGAGGACCCGCC 62
Db 20 CTGCGCGTGAGGACCCGCC 1

RESULT 455
AD032853/C
ID AD032853 standard; DNA; 20 BP.
XX
XX AC AD032853;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 301.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
PH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WC2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 30; SEQ ID NO 301; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cycostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of

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CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4,8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Oy 3262 CTGAGGCTACCATGACATTC 3281
Db 20 CTGAGGCTACCATGACATTC 1
XX
XX RESULT 456
XX AD033113
XX ID AD033113 standard; DNA; 20 BP.
XX
XX AC AD033113;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 561.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
XX Homo sapiens.
XX
XX OS
XX PN WC2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 561; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cycostatic,

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CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 889 AGCATGTGGCAGAGCCATC 908  
 Db 1 AGCATGTGGCAGAGCCATC 20  
 RESULT 457  
 ADO33117  
 ID ADO33117 standard; DNA; 20 BP.  
 AC ADO33117;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 565.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 565; 483pp; English.  
 XX

CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1390 CCTCAGCACAGCAGCTGCGA 1409  
 Db 1 CCTCAGCACAGCAGCTGCGA 20  
 RESULT 458  
 ADO33121  
 ID ADO33121 standard; DNA; 20 BP.  
 AC ADO33121;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 569.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX

PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 36; SEQ ID NO 569; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1749 CAGGAGGTTCTTCTTCAGAC 1768  
 Db |||||  
 1 CAGGAGGTTCTTCTTCAGAC 20  
 RESULT 459  
 ADO33126  
 ID ADO33126 standard; DNA; 20 BP.  
 XX  
 AC ADO33126;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 574.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN  
 XX 27-MAY-2004.  
 PD  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 PR 15-MAY-2003; 2003WO-US015493.

XX (ISIS-) ISIS PHARM INC.  
 PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX Example 36; SEQ ID NO 574; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 XX Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2729 CAACATGCAGGCTGAACCTGG 2748  
 Db |||||  
 1 CAACATGCAGGCTGAACCTGG 20  
 RESULT 460  
 ADO33129  
 ID ADO33129 standard; DNA; 20 BP.  
 XX  
 AC ADO33129;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 577.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 XX Homo sapiens.  
 OS  
 XX WO2004044181-A2.  
 PN

XX PD 27-MAY-2004.  
 XX KW 13-NOV-2003; 2003WO-US036411.  
 XX PF 13-NOV-2002; 2002US-0426234P.  
 PR PR 15-MAY-2003; 2003WO-US015493.  
 XX XX (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX PS Example 36; SEQ ID NO 577; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3118 GGGACACCGATTAGAGCTG 3137  
 DB 1 GGGACACCGATTAGAGCTG 20  
 |||||  
 RESULT 461  
 AD033135  
 ID AD033135 standard; DNA; 20 BP.  
 AC AD033135;  
 XX 12-AUG-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 583.  
 DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 XX antisense target.  
 OS Homo sapiens.  
 XX WO2004044181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 PR PR 15-MAY-2003; 2003WO-US015493.  
 XX XX (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX DR WPI; 2004-420321/39.  
 XX XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX PS Example 36; SEQ ID NO 583; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4180 CTCCTCTGGGTGTTCTAGAC 4199  
 DB 1 CTCCTCTGGGTGTTCTAGAC 20  
 |||||  
 RESULT 462  
 AD033137  
 ID AD033137 standard; DNA; 20 BP.  
 AC AD033137;  
 XX 12-AUG-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 585.  
 DE apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cyrostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
KW antisense target.  
XX  
XX Homo sapiens.  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.  
XX  
XX Example 36; SEQ ID NO 585; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cyrostatic,  
XX endocrine, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
XX impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes,  
XX obesity and atherosclerosis. The current sequence is that of a  
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the  
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 4511 GGGACCAAGATGCTGCTT 4530  
XX |||||  
XX Db 1 GGGACCAAGATGCTGCTT 20  
XX  
XX RESULT 463  
XX ADO33204  
XX ID ADO33204 standard; DNA; 20 BP.  
XX

AC ADO33204;  
XX  
XX 12-AUG-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 652.  
XX  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
XX antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
XX anabolic; eating disorder; cyrostatic; endocrine; vasotropic;  
XX neuroprotective; nootropic; lipid; cholesterol metabolism;  
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
XX antisense target.  
XX  
XX Homo sapiens.  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.  
XX  
XX Example 36; SEQ ID NO 652; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cyrostatic,  
XX endocrine, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal  
XX lipid or cholesterol metabolism. The compound may be useful for  
XX decreasing circulating lipoprotein levels, triglyceride levels,  
XX cholesterol levels, lipid levels, fatty acid levels, acute phase  
XX reactants and chylomicrons and thus may be utilised during treatment of  
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
XX impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes,  
XX obesity and atherosclerosis. The current sequence is that of a  
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the  
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 3232 TTGTAAGTCAAGCAGAGGT 3251  
XX |||||  
XX



CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 3256 AGCAGACTGAGGCTACCATG 3275  
Db 1 AGCAGACTGAGGCTACCATG 20  
  
RESULT 466  
ADO33222  
ID ADO33222 standard; DNA; 20 BP.  
XX  
AC ADO33222;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 670.  
XX  
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
KW antisense target.  
XX  
OS Homo sapiens.  
XX  
PN WO2004044181-A2.  
XX  
PD 27-MAY-2004.  
XX  
PF 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
XX  
PS 15-MAY-2003; 2003WO-US015493.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
XX syndrome.  
XX  
PS Example 36; SEQ ID NO 670; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
XX hybridises to and inhibits expression of mRNA encoding human  
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
XX confluent HepG2 cells in culture at a concentration of 150 nM. The  
XX compound of the invention demonstrates cardiovascular,  
XX antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
XX endocrine, vasotropic, neuroprotective and nootropic activities and may  
XX be useful for inhibiting the expression of apolipoprotein B in cells or  
XX tissues in vivo in order to address a condition associated with abnormal

CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia, of  
CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
XX  
SQ Sequence 20 BP; 8 A; 5 C; 1 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 3268 CTACCATGACATTCAAATAT 3287  
Db 1 CTACCATGACATTCAAATAT 20  
  
RESULT 467  
ADO32572/c  
ID ADO32572 standard; DNA; 20 BP.  
XX  
AC ADO32572;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 20.  
XX  
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
XX modified\_base 1..20  
XX /\*tag= a  
XX /mod\_base= OTHER  
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-  
XX methycytidines"  
XX  
XX WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
XX 13-NOV-2002; 2002US-0426234P.  
XX  
XX 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,  
XX

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX syndrome.  
 XX  
 PS Example 15; SEQ ID NO 20; 483pp; English.  
 XX  
 PS The invention relates to a novel antisense compound where the compound  
 XX hybridises to and inhibits expression of mRNA encoding human  
 PS apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasoprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 20; DB 1; Length 20;  
 DB Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 114 CCACCGCAGCTGGCGATGGA 133  
 DB 20 CCACCGCAGCTGGCGATGGA 1  
 RESULT 468  
 ADO32585/C  
 ID ADO32585 standard; DNA; 20 BP.  
 XX  
 AC ADO32585;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 33.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX

PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 15; SEQ ID NO 33; 483pp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 20; DB 1; Length 20;  
 DB Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1791 GGAGATAAGCGACTGGCTGC 1810  
 DB 20 GGAGATAAGCGACTGGCTGC 1  
 RESULT 469  
 ADO32677/C  
 ID ADO32677 standard; DNA; 20 BP.  
 XX  
 AC ADO32677;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 125.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW





SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 429 GAGGTGTATGGTTCACCC 448  
 Db 20 GAGGTGTATGGTTCACCC 1

RESULT 471  
 ADO32680/C  
 ID ADO32680 standard; DNA; 20 BP.  
 XX  
 AC ADO32680;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 128.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 XX WPI; 2004-420321/39.  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 29; SEQ ID NO 128; 483bp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may

be useful for inhibiting the expression of apolipoprotein B in cells or  
 tissues in vivo in order to address a condition associated with abnormal  
 lipid or cholesterol metabolism. The compound may be useful for  
 decreasing circulating lipoprotein levels, triglyceride levels,  
 cholesterol levels, lipid levels, fatty acid levels, acute phase  
 reactants and chylomicrons and thus may be utilised during treatment of  
 hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 diabetes, obesity and atherosclerosis. The current sequence is that of an  
 antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 targeted to human ApoB RNA.

SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 509 CAGGTATGAGCTCAAGCTGG 528  
 Db 20 CAGGTATGAGCTCAAGCTGG 1

RESULT 472  
 ADO32753/C  
 ID ADO32753 standard; DNA; 20 BP.  
 XX  
 AC ADO32753;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 201.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 XX WPI; 2004-420321/39.  
 XX

PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 29; SEQ ID NO 201; 483pp; English.  
 PS  
 PS The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosclatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1749 CAGGAGGTTCTCTTCAGAC 1768  
 DB 20 CAGGAGGTTCTCTTCAGAC 1  
 RESULT 473  
 ADO32757/C  
 ID ADO32757 standard; DNA; 20 BP.  
 XX  
 XX AC ADO32757;  
 XX  
 XX DT 12-AUG-2004 (first entry)  
 XX  
 XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 205.  
 XX  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosclatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 XX

PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 PT  
 XX Example 29; SEQ ID NO 205; 483pp; English.  
 PS  
 PS The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosclatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApoB RNA.  
 XX  
 XX SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2649 GGAGCTGGATTACAGTTGCA 2668  
 DB 20 GGAGCTGGATTACAGTTGCA 1  
 RESULT 474  
 ADO32769/C  
 ID ADO32769 standard; DNA; 20 BP.  
 XX  
 XX AC ADO32769;  
 XX  
 XX DT 12-AUG-2004 (first entry)  
 XX  
 XX DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 217.  
 XX  
 XX KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytosclatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX Homo sapiens.  
OS  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
PN WO2004044181-A2.  
XX  
XX  
PD 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
PI WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 29; SEQ ID NO 217; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human ApoB RNA.  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 4511 GGGACACACAGATGCTGCTT 4530  
|||||  
DB 20 GGGACACACAGATGCTGCTT 1  
  
RESULT 475  
ADO32848/c

ID ADO32848 standard; DNA; 20 BP.  
XX  
AC ADO32848;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 296.  
DE  
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
PN WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
PI WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 30; SEQ ID NO 296; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human ApoB RNA.  
XX

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CC targeted to human ApOB RNA.
XX SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
      Query Match      0.1%; Score 20; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3252 GCGAAGCAGACTGAGGCTAC 3271
Db 20 GCGAAGCAGACTGAGGCTAC 1

RESULT 476
ADO33077
ID ADO33077 standard; DNA; 20 BP.
AC ADO33077;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 525.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
PN WO2004044181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PS Example 36; SEQ ID NO 525; 483pp; English.
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,
CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of

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CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of a
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
CC invention. The human ApOB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
      Query Match      0.1%; Score 20; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred. No. 4.8e+02;
      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2299 GTCAAGTTCCTGATGGTGC 2318
Db 1 GTCAAGTTCCTGATGGTGC 20

RESULT 477
ADO33111
ID ADO33111 standard; DNA; 20 BP.
XX
AC ADO33111;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 559.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
PN WO2004044181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PS Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
CC Example 36; SEQ ID NO 559; 483pp; English.
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,

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CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 829 CCTGTGCAACTCTGATCACC 848  
 Db 1 CCTTGTCAACTCTGATCACC 20  
 RESULT 478  
 ADO33206  
 ID ADO33206 standard; DNA; 20 BP.  
 XX  
 AC ADO33206;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 654.  
 DE  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 654; 483pp; English.  
 XX

CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent Hep2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3236 AACTCAAGCAGAGGTGCGA 3255  
 Db 1 AACTCAAGCAGAGGTGCGA 20  
 RESULT 479  
 ADO32692/C  
 ID ADO32692 standard; DNA; 20 BP.  
 XX  
 AC ADO32692;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 140.  
 DE  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX

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PR 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
PT
XX Example 29; SEQ ID NO 140; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1859 TGTCCTCAATTCACCATGGG 1878
DB 20 TGTCCTCAATTCACCATGGG 1
XX
RESULT 480
AD032696/c
ID AD032696 standard; DNA; 20 BP.
XX
XX AD032696;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 144.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX

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---

```

FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 29; SEQ ID NO 144; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB RNA.
XX
XX Sequence 20 BP; 6 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2518 AGCTGCTTCTGATGGGTGCC 2537
DB 20 AGCTGCTTCTGATGGGTGCC 1
XX
RESULT 481
AD032700/c
ID AD032700 standard; DNA; 20 BP.
XX
XX AD032700;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 148.
XX

```

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipæmic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
PA WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
PF 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 29; SEQ ID NO 148; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipæmic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
CC targeted to human ApoB RNA.  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3449 GGGCCACCTAAGTTGTGACA 3468  
Db |||||  
20 GGGCCACCTAAGTTGTGACA 1  
  
RESULT 482  
ADO32809/c  
ID ADO32809 standard; DNA; 20 BP.  
XX  
AC ADO32809;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 257.  
XX  
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
KW antilipæmic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
FT methylcytidines"  
XX  
PN WO2004044181-A2.  
XX  
XX 27-MAY-2004.  
XX  
XX 13-NOV-2003; 2003WO-US036411.  
XX  
PR 13-NOV-2002; 2002US-0426234P.  
PR 15-MAY-2003; 2003WO-US015493.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
XX WPI; 2004-420321/39.  
XX  
XX Antisense oligonucleotide compound that inhibits expression of mRNA  
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
PT syndrome.  
XX  
XX Example 29; SEQ ID NO 257; 483pp; English.  
XX  
XX The invention relates to a novel antisense compound where the compound  
CC hybridises to and inhibits expression of mRNA encoding human  
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
CC compound of the invention demonstrates cardiovascular,  
CC antiarteriosclerotic, antilipæmic, antidiabetic, anorectic, cardiant,  
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
CC be useful for inhibiting the expression of apolipoprotein B in cells or  
CC tissues in vivo in order to address a condition associated with abnormal  
CC lipid or cholesterol metabolism. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
CC reactants and chylomicrons and thus may be utilised during treatment of  
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
CC diabetes, obesity and atherosclerosis. The compound may be useful for  
CC decreasing circulating lipoprotein levels, triglyceride levels,  
CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApOB RNA.

XX  
 SQ Sequence 20 BP; 2 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 120 CAGCTGGCGATGGACCCGCC 139  
 Db 20 CAGCTGGCGATGGACCCGCC 1

RESULT 483  
 ID ADO32850/c  
 AD ADO32850 standard; DNA; 20 BP.

XX  
 AC ADO32850;

XX  
 DT 12-AUG-2004 (first entry)

XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApOB RNA - SEQ 298.

XX  
 KW apolipoprotein B; ApOB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

XX  
 OS Homo sapiens.

XX  
 FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= a

FT /mod base= OTHER

FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-

FT methylcytidines"

XX  
 FN WO2004044181-A2.

XX  
 PD 27-MAY-2004.

XX  
 PF 13-NOV-2003; 2003WO-US036411.

XX  
 PR 13-NOV-2002; 2002US-0426234P.

XX  
 PR 15-MAY-2003; 2003WO-US015493.

XX  
 PA (ISIS-) ISIS PHARM INC.

XX  
 FI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX  
 PI WPI; 2004-420321/39.

XX  
 DR Antisense oligonucleotide compound that inhibits expression of mRNA

PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

PT syndrome.

XX

PS Example 30; SEQ ID NO 298; 483pp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApOB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipaeamic, antidiabetic, anorectic, cardiac,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human ApOB RNA.

XX  
 SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3256 AGCAGACTGAGGCTACCATG 3275  
 Db 20 AGCAGACTGAGGCTACCATG 1

RESULT 484  
 ID ADO33069  
 AD ADO33069 standard; DNA; 20 BP.

XX  
 AC ADO33069;

XX  
 DT 12-AUG-2004 (first entry)

XX  
 DE Human apolipoprotein B (ApOB) antisense therapy target DNA - SEQ 517.

XX  
 KW apolipoprotein B; ApOB; cardiovascular; antiarteriosclerotic;  
 KW antilipaeamic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.

XX  
 OS Homo sapiens.

XX  
 FN WO2004044181-A2.

XX  
 PD 27-MAY-2004.

XX  
 PF 13-NOV-2003; 2003WO-US036411.

XX  
 PR 13-NOV-2002; 2002US-0426234P.

XX  
 PR 15-MAY-2003; 2003WO-US015493.

XX  
 PA (ISIS-) ISIS PHARM INC.

XX  
 FI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

XX



DR WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA

PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

PT syndrome.

XX Example 36; SEQ ID NO 517; 483pp; English.

PS The invention relates to a novel antisense compound where the compound

XX hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

CC confluent HepG2 cells in culture at a concentration of 150 nM. The

CC compound of the invention demonstrates cardiovascular,

CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,

CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,

CC endocrine, vasotropic, neuroprotective and nootropic activities and may

CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal

CC lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, and

CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

CC diabetes, obesity and atherosclerosis. The current sequence is that of a

CC human apolipoprotein B (ApoB) antisense therapy target DNA of the

CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

SEQ

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 509 CAGGTATGAGCTCAAGCTGG 528

DB 1 CAGGTATGAGCTCAAGCTGG 20

RESULT 485

ADO33109

ID ADO33109 standard; DNA; 20 BP.

AC ADO33109;

XX 12-AUG-2004 (first entry)

XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 557.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;

KW neuroprotective; nootropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

KW von Gierke's disease; lipodystrophy; Cushing's syndrome;

KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;

XX antisense target.

XX Homo sapiens.

XX WO200404181-A2.

PN 27-MAY-2004.

PD 13-NOV-2003; 2003WO-US036411.

PF 13-NOV-2003; 2003WO-US036411.

XX

PR 13-NOV-2002; 2002US-0426234P.

XX 15-MAY-2003; 2003WO-US015493.

PA (ISIS-) ISIS PHARM INC.

XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

PI WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA

PT encoding human apolipoprotein B, useful for treating hyperlipidemia,

PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's

PT syndrome.

XX Example 36; SEQ ID NO 557; 483pp; English.

PS The invention relates to a novel antisense compound where the compound

XX hybridises to and inhibits expression of mRNA encoding human

CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

CC confluent HepG2 cells in culture at a concentration of 150 nM. The

CC compound of the invention demonstrates cardiovascular,

CC antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiant,

CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,

CC endocrine, vasotropic, neuroprotective and nootropic activities and may

CC be useful for inhibiting the expression of apolipoprotein B in cells or

CC tissues in vivo in order to address a condition associated with abnormal

CC lipid or cholesterol metabolism. The compound may be useful for

CC decreasing circulating lipoprotein levels, triglyceride levels,

CC cholesterol levels, lipid levels, fatty acid levels, acute phase

CC reactants and chylomicrons and thus may be utilised during treatment of

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,

CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's

CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,

CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,

CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

CC diabetes, obesity and atherosclerosis. The current sequence is that of a

CC human apolipoprotein B (ApoB) antisense therapy target DNA of the

CC invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

SEQ

Query Match 0.1%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 4.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 529 CCATTCCAGAGGAGGAGCAG 548

DB 1 CCATTCCAGAGGAGGAGCAG 20

RESULT 486

ADO33131

ID ADO33131 standard; DNA; 20 BP.

AC ADO33131;

XX 12-AUG-2004 (first entry)

XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 579.

XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;

KW antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;

KW anabolic; eating disorder; cyostatic; endocrine; vasotropic;

KW neuroprotective; nootropic; lipid; cholesterol metabolism;

KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

KW von Gierke's disease; lipodystrophy; Cushing's syndrome;

KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;

KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;

KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;

XX antisense target.

XX Homo sapiens.

XX PN W02004044181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX PF WPI; 2004-420321/39.  
 XX DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX CC encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX CC syndrome.  
 XX PS Example 36; SEQ ID NO 579; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 XX CC hybridises to and inhibits expression of mRNA encoding human  
 XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX CC compound of the invention demonstrates cardiovascular,  
 XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 XX CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX CC tissues in vivo in order to address a condition associated with abnormal  
 XX CC lipid or cholesterol metabolism. The compound may be useful for  
 XX CC decreasing circulating lipoprotein levels, triglyceride levels,  
 XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX CC reactants and chylomicrons and thus may be utilised during treatment of  
 XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 XX CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 XX CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX CC Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 XX CC  
 XX CC Query Match 0.1%; Score 20; DB 1; Length 20;  
 XX CC Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 XX CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3289 ATCGGACAGTATGACCTTG 3308  
 DB 1 ATCGGACAGTATGACCTTG 20  
 RESULT 487  
 AD033211  
 ID AD033211 standard; DNA; 20 BP.  
 XX AC  
 XX AC AD033211;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 659.  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;

KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's disease, dementia;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX Homo sapiens.  
 XX PN W02004044181-A2.  
 XX PD 27-MAY-2004.  
 XX PF 13-NOV-2003; 2003WO-US036411.  
 XX PR 13-NOV-2002; 2002US-0426234P.  
 XX PR 15-MAY-2003; 2003WO-US015493.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX PF WPI; 2004-420321/39.  
 XX DR Antisense oligonucleotide compound that inhibits expression of mRNA  
 XX CC encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 XX CC diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 XX CC syndrome.  
 XX PS Example 36; SEQ ID NO 659; 483pp; English.  
 XX CC The invention relates to a novel antisense compound where the compound  
 XX CC hybridises to and inhibits expression of mRNA encoding human  
 XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 XX CC compound of the invention demonstrates cardiovascular,  
 XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 XX CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 XX CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 XX CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 XX CC tissues in vivo in order to address a condition associated with abnormal  
 XX CC lipid or cholesterol metabolism. The compound may be useful for  
 XX CC decreasing circulating lipoprotein levels, triglyceride levels,  
 XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 XX CC reactants and chylomicrons and thus may be utilised during treatment of  
 XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 XX CC syndrome, sexual ateliotic dwarfism, hepatoma, multiple myeloma, uraemia,  
 XX CC anorexia nervosa, Werner's syndrome, hyperthyroidism, hypertension,  
 XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 XX CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 XX CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 XX CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX CC Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
 XX CC  
 XX CC Query Match 0.1%; Score 20; DB 1; Length 20;  
 XX CC Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 XX CC Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3246 GAAGGTGCGAAGCAGACTGA 3265  
 DB 1 GAAGGTGCGAAGCAGACTGA 20  
 RESULT 488  
 AD033212  
 ID AD033212 standard; DNA; 20 BP.  
 XX AC  
 XX AC AD033212;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 660.

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XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
OS Homo sapiens.
XX WO2004044181-A2.
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 660; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular.
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3248 AGGTGCGAGGACGACTGAGG 3267
XX |||||||||||||||||||
XX 1 AGGTGCGAGGACGACTGAGG 20
XX
XX RESULT 489
XX ADO33213

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ID ADO33213 standard; DNA; 20 BP.
XX
AC ADO33213;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 661.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;
KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX antisense target.
XX
OS Homo sapiens.
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 661; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 4.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 3250 GTGCGAGGACACTGAGGCT 3269  
 Db 1 GTGCGAAGCAGACTGAGGCT 20

RESULT 490  
 ADO33219  
 ID ADO33219 standard; DNA; 20 BP.  
 XX  
 AC ADO33219;  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 667.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipidemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytotatic; endocrine; vasotrophic;  
 KW neuroprotective; notropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 PI WPI; 2004-420321/39.  
 DR  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 667; 483pp; English.

The invention relates to a novel antisense compound where the compound hybridises to and inhibits expression of mRNA encoding human apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80% confluent HepG2 cells in culture at a concentration of 150 nM. The compound of the invention demonstrates cardiovascular, antiarteriosclerotic, antilipidemic, antidiabetic, anorectic, cardiac, vasotropic, hypotensive, anabolic, eating disorder-related, cytotatic, endocrine, neuroprotective and notropic activities and may be useful for inhibiting the expression of apolipoprotein B in cells or tissues in vivo in order to address a condition associated with abnormal lipid or cholesterol metabolism. The compound may be useful for decreasing circulating lipoprotein levels, triglyceride levels, cholesterol levels, lipid levels, fatty acid levels, acute phase reactants and chylomicrons and thus may be utilised during treatment of hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension, anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia, impotence, obstructive liver disease, Alzheimer's disease, dementia, diabetes, obesity and atherosclerosis. The current sequence is that of a human apolipoprotein B (ApoB) antisense therapy target DNA of 2p23-2p24. invention. The human ApoB gene is located at chromosome 2p23-2p24.

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3262 CTGAGGCTACCATGACATTC 3281  
 Db 1 CTGAGGCTACCATGACATTC 20

RESULT 491  
 AAQ72756  
 ID AAQ72756 standard; DNA; 25 BP.  
 XX  
 XX AAQ72756;  
 DT 25-MAR-2003 (revised)  
 DT 08-JUN-1995 (first entry)  
 XX  
 DE Solid phase restriction enzymatic amplification primer #1.  
 XX  
 KW Primer; solid phase; restriction enzyme; amplification; cleavage site;  
 KW recognition sequence; complementary region; hybridise; target; detection;  
 KW single strand; hybridisation; probe; enzyme; horseradish peroxidase;  
 KW alkaline phosphatase; quantification; pathogenic; organism; allelic;  
 KW variant; genomic; defect; diagnosis; genetic disease; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN FR2697851-A1.  
 XX  
 PD 13-MAY-1994.  
 XX  
 PF 10-NOV-1992; 92FR-00013562.  
 XX  
 PR 10-NOV-1992; 92FR-00013562.  
 XX  
 PA (INMR ) BIO MERIEUX.  
 XX  
 XX Gruters R, Cleuziat P, Bonnici F, Mallet F;  
 PI WPI; 1994-318696/40.  
 DR  
 XX  
 XX Detecting target nucleic acid by restriction enzyme amplification - using  
 PT two immobilised, partially double stranded probes, one complementary to  
 PT target and the other to the first probe cleavage product.  
 XX  
 PS Example 1; Page 10; 24pp; French.

A series of primers (AAQ72756-64) used in the novel process solid phase restriction enzymatic amplification (SPREA). The method is based on the type II restriction enzymes (RE), especially those that cleave outside their recognition sequence e.g. BsaI. The process involves binding a primer containing one strand of the RE cleavage site, and extending no further than the RE cleavage site, to a solid support e.g. the walls of a microtiter plate well. A second primer with a region complementary to the first primer hybridises to the first primer and extends as a single strand from the cleavage site to the RE recognition site. The extension region of the second primer, in one case, includes a region complementary to the target and, for the other primer, a single strand region which will bind the sequence complementary to the target sequence. One of the single-stranded regions has a 5' end, the other a 3' end. DNA from the sample to be detected e.g. whole cell extract DNA, is added to the well such that the target DNA and the first primer hybridise and regenerate the RE-cleavage site. The RE cleaves the site and releases the target sequence and its complement which can then hybridise to the second probe. The second round of cleavage results in both strands, equivalent to the target sequence, being amplified. Detection of the product is performed by hybridisation of probes (e.g. AAQ72761-2) linked to an enzyme e.g. horseradish peroxidase or alkaline phosphatase. The method provides a rapid and sensitive detection of target sequences without the use of

CC radioisotopes. The target sequence to be detected can be determined by  
 CC the sequence of the bound primers and the type II RE involved. This  
 CC system allows the detection and/or quantification of pathogenic  
 CC organisms, allelic variants, genomic defects, specific mRNAs etc., e.g.  
 CC for diagnosis of genetic diseases. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX  
 SQ Sequence 25 BP; 0 A; 9 C; 8 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 20; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 6.7e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 176 GCTGCTGCTGCTGCTGCTG 195  
 Db 1 GCTGCTGCTGCTGCTGCTG 20  
 RESULT 492  
 AAH28142  
 ID AAH28142 standard; DNA; 26 BP.  
 XX  
 AC  
 XX AAH28142;  
 DT 05-SEP-2001 (first entry)  
 XX  
 DE PCR primer used to amplify a partial cDNA sequence of EST M91490.  
 XX  
 KW Expressed sequence tag; EST; M91490; Th1; Th2; Th3; cytokine;  
 KW suppressive macrophage activation factor; SMAF-1; SMAF-2; inflammation;  
 KW infection; allergy; autoimmune disease; transplant rejection;  
 KW graft-versus host disease; malignancy; mucosal immunity; trypanosomiasis;  
 KW inflammatory bowel disease; leishmaniasis; malaria; schistosomiasis;  
 KW HIV-associated disease; measles; influenza; tuberculosis; lepra;  
 KW psoriasis; multiple sclerosis; rheumatoid arthritis; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200139786-A2.  
 XX  
 PD 07-JUN-2001.  
 XX  
 PF 20-NOV-2000; 2000WO-EP011527.  
 XX  
 PR 30-NOV-1999; 99EP-00870245.  
 XX  
 PA (INNO-) INNOGENETICS NV.  
 XX  
 PI Franssen L, De Baetselier P;  
 XX  
 DR WPI; 2001-417788/44.  
 XX  
 PT New suppressive macrophage activation factor proteins, SMAF-1 or SMAF-2  
 PT useful for the manufacture of medicament for treating type 1, type 2 or  
 PT type 3 responses.  
 XX  
 PS Example 1; Page 19; 103pp; English.  
 XX  
 CC PCR primers AAH28141-42 were used to amplify a partial cDNA sequence of  
 CC expressed sequence tag (EST) M91490. This EST is related to human  
 CC suppressive macrophage activation factor (SMAF)-1, and is referred to as  
 CC SMAF-2. SMAF-1 and SMAF-2 modulate the production of Th1, Th2 and Th3  
 CC cytokines. The specification describes the use of SMAF-1 and SMAF-2 for  
 CC the manufacture of a medicament for the treatment of diseases mediated by  
 CC type 1, type 2 or type 3 responses, such as inflammation, infections,  
 CC allergies, autoimmune diseases, transplant rejections, graft-versus host  
 CC disease, malignancies and diseases involving mucosal immunity. They are  
 CC used especially for the treatment of inflammatory bowel disease,  
 CC leishmaniasis, trypanosomiasis, malaria, schistosomiasis, HIV-associated  
 CC diseases, measles, influenza, tuberculosis, lepra, and infections by  
 CC Candida, Borrelia, Listeria, Bordetella or Chlamydia, psoriasis, multiple  
 CC sclerosis, and rheumatoid arthritis  
 XX

SQ Sequence 26 BP; 9 A; 9 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19.8; DB 1; Length 26;  
 Best Local Similarity 91.3%; Pred. No. 7.5e+02;  
 Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1069 AATCCACATCATCTCCAAAGCAG 1091  
 Db 4 AATTCCTCATCTCCAAAGCAG 26  
 RESULT 493  
 ABK85840  
 ID ABK85840 standard; DNA; 23 BP.  
 XX  
 AC ABK85840;  
 XX  
 DT 24-SEP-2002 (first entry)  
 XX  
 DE Myotonic dystrophy protein kinase (DMPK) 3'UTR fragment.  
 XX  
 KW Myotonic dystrophy; DM; protein kinase; DMPK; myocardial infarction;  
 KW muscle damage; dysfunction; CTG repeat; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2002061571-A1.  
 XX  
 PD 23-MAY-2002.  
 XX  
 PF 20-MAR-2001; 2001US-00813289.  
 XX  
 PR 20-MAR-2000; 2000US-0190590P.  
 XX  
 PA (MAHA/) MAHADEVAN M S.  
 PA (TISC/) TISCORNIA G.  
 XX  
 PI Mahadevan MS, Tiscornia G;  
 XX  
 DR WPI; 2002-507644/54.  
 XX  
 PT A new isoform of myotonic dystrophy protein kinase includes a sequence  
 PT encoded by exon 16 of the gene and is useful to detect presence or risk  
 PT of myotonic dystrophy, myocardial infarction or a condition associated  
 PT with muscle damage.  
 XX  
 PS Example; Page 9; 26pp; English.  
 XX  
 CC The invention describes an isolated and purified polypeptide, comprising  
 CC an amino acid sequence encoded by exon 16 of the myotonic dystrophy  
 CC protein kinase (DMPK) gene. The invention is used to detect presence or  
 CC risk of myotonic dystrophy, myocardial infarction or a condition  
 CC associated with muscle damage or dysfunction. This sequence represents  
 CC the CTG repeat isolated from the 3' UTR of the novel Myotonic dystrophy  
 CC protein kinase (DMPK) isoform gene  
 XX  
 SQ Sequence 23 BP; 2 A; 5 C; 10 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19.4; DB 1; Length 23;  
 Best Local Similarity 95.2%; Pred. No. 7.1e+02;  
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 178 TGCTGCTGCTGCTGCTGCGG 198  
 Db 3 TGCTGCTGCTGCTGCTGCGG 23  
 RESULT 494  
 AAI62090/c  
 ID AAI62090 standard; DNA; 25 BP.  
 XX  
 AC AAI62090;  
 XX

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DT 16-OCT-2001 (first entry)
XX DE Soybean 318013 region A3 DNA forward primer, SEQ ID NO: 721.
XX KW Soybean; antihelminthic; gene therapy; soybean cyst nematode; SCN;
XX KW SCN resistance; rhg1; Rhg4; SCN resistant allele; plant breeding;
XX KW 240017 region G3; 318013 region A3; 515002 region G2; PCR primer; ss.
XX OS Glycine max.
XX PN WO200151627-A2.
XX PD 19-JUL-2001.
XX PF 05-JAN-2001; 2001WO-US000552.
XX PR 07-JAN-2000; 2000US-0174880P.
XX PA (MONS ) MONSANTO CO.
XX PI Hauge BM, Wang ML, Parsons JD, Parnell LD;
XX DR WPI; 2001-425872/45.
XX PT New purified nucleic acid for producing a soybean plant having soybean
XX PT cyst nematode resistance and for use in plant breeding programs.
XX PS Claim 25; Page 1203; 1353pp; English.
XX CC The invention relates to nucleic acid molecules from regions of the
XX CC soybean genome which are associated with soybean cyst nematode (SCN)
XX CC resistance. The nucleic acids are used to transform plants, and can
XX CC produce soybean plants having an rhg1 or an Rhg4 SCN resistant allele.
XX CC The nucleic acids can be used for investigating rhg1 or Rhg4 haplotypes
XX CC of soybean plants and for introgressing SCN resistance or partial SCN
XX CC resistance into soybean plants. They can also be used in plant breeding
XX CC programmes. The invention also relates to proteins encoded by such
XX CC nucleic acid molecules, as well as antibodies capable of recognising
XX CC these proteins. The present sequence is a primer used to amplify a region
XX CC of the soybean genome
XX SQ Sequence 25 BP; 6 A; 5 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1658 CCTCAATGTGTCACAAAGTACAAA 1681
Db | | | | | | | | | | | | | | | | | | | |
24 CTTCAATGTGTGCGAAGTACAAA 1

RESULT 495
ADO33423/C
ID ADO33423 standard; DNA; 19 BP.
XX AC ADO33423;
XX AC
XX DT 12-AUG-2004 (first entry)
XX DE Antisense 2'-MOE gapmer oligo targeted to human Apob - SEQ ID 871.
XX KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cycostatic; cardiant; vasotropic; hypotensive;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss.

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XX OS Homo sapiens.
XX PH Key Location/Qualifiers
FT modified_base 1..19
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-19 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX PN WO2004044181-A2.
XX PD 27-MAY-2004.
XX PF 13-NOV-2003; 2003WO-US036411.
XX PR 13-NOV-2002; 2002US-0426234P.
XX PR 15-MAY-2003; 2003WO-US015493.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX DR WPI; 2004-420321/39.
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX PT syndrome.
XX PS Example 59; SEQ ID NO 871; 483pp; English.
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX CC vasotrophic, hypotensive, anabolic, eating disorder-related, cycostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia, Cushing's
XX CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to human Apob RNA.
XX SQ Sequence 19 BP; 2 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3250 GTGCGAAGCAGACTGTAGGC 3268
Db | | | | | | | | | | | | | | | | | | | |
19 GTGCGAAGCAGACTGTAGGC 1

RESULT 496
ADR75553
ID ADR75553 standard; DNA; 19 BP.
XX AC ADR75553;
XX AC

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DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 38.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1207 ATGAAGCAGTCACATCTCT 1225  
 Db 1 ATGAAGCAGTCACATCTCT 19  
 RESULT 497  
 ADR75558  
 ID ADR75558 standard; DNA; 19 BP.  
 XX  
 AC ADR75558;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 43.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1521 GACATTGCTAATTACCTGA 1539  
 Db 1 GACATTGCTAATTACCTGA 19

RESULT 498  
 ID ADR75560  
 AD ADR75560 standard; DNA; 19 BP.  
 XX AC ADR75560;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 45.  
 XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 45; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1921 CCAATATCTTGAACCTCAGA 1939  
 Db 1 CCAATATCTTGAACCTCAGA 19

RESULT 499  
 ADR75567  
 ID ADR75567 standard; DNA; 19 BP.  
 XX AC ADR75567;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 52.  
 XX



antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
Homo sapiens.  
WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

14-APR-2003; 2003US-0455050P.

17-APR-2003; 2003US-0462894P.

25-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

09-MAY-2003; 2003US-0465802P.

08-AUG-2003; 2003US-0469612P.

11-AUG-2003; 2003US-0493986P.

26-SEP-2003; 2003US-0494597P.

09-OCT-2003; 2003US-0506341P.

10-OCT-2003; 2003US-0510246P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 52; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred.No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2580 AGGAAGGCTCAAGAATG 2598

|||||  
Db 1 AGGAAGGCTCAAGAATG 19

RESULT 500

ADR75648

ID ADR75648 standard; DNA; 19 BP.

XX

AC ADR75648;

XX

16-DEC-2004 (first entry)

XX

Human apolipoprotein B (ApoB) oligonucleotide seqid 133.

XX

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS

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WO2004080406-A2.

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08-MAR-2004; 2004WO-US007070.

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CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 362 CAAGTTGAGCTGGAGGTT 380

Db 1 CAAGTTGAGCTGGAGGTT 19

RESULT 501

ADR75703

ID ADR75703 standard; DNA; 19 BP.

XX AC ADR75703;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 188.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX XX

XX W02004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-MAR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemiae, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 188; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2994 CTCATTGAGAACAGGCGT 3012

Db 1 CTCATTGAGAACAGGCGT 19

RESULT 502

ADR75726

ID ADR75726 standard; DNA; 19 BP.

XX AC ADR75726;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 211.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0508341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX PA Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 214; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX CC The subject is suffering from a disorder characterised by elevated or  
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-  
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX CC lung cancer), neurological disease (e.g., Huntington disease or  
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX CC can be used to control ApoB gene expression.  
XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4261 CCAGCACAGACATTTCAG 4279  
Db 1 CCAGCACAGACATTTCAG 19  
RESULT 503  
ADR75729  
ID ADR75729 standard; DNA; 19 BP.  
XX AC ADR75729;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 214.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0508341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX PA (ALNY-) ALNYLAM PHARM.  
XX PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 214; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX CC The subject is suffering from a disorder characterised by elevated or  
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-  
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX CC lung cancer), neurological disease (e.g., Huntington disease or  
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX CC can be used to control ApoB gene expression.  
XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4515 CCACAGATGCTGCTTCAG 4533  
 |||||  
 Db 1 CCACAGATGCTGCTTCAG 19

RESULT 504  
 ADR75852  
 ID ADR75852 standard; DNA; 19 BP.  
 XX  
 AC ADR75852;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 337.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0453772P.  
 PR 25-APR-2003; 2003US-0456655P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 337; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 565 AGAAGATGAACCTACTTA 583  
 |||||  
 Db 1 AGAAGATGAACCTACTTA 19

RESULT 505  
 ADR75888  
 ID ADR75888 standard; DNA; 19 BP.  
 XX  
 AC ADR75888;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 373.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 373; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 364 AGGTGAGCTGGAGGTTCC 382  
 ID ADR75892 standard; DNA; 19 BP.  
 Db 1 AGGTGAGCTGGAGGTTCC 19  
 AC ADR75892;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 377.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 377; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 482 CTCGAGGAGTTGCTGCA 500  
 Db 1 CTCGAGGAGTTGCTGCA 19

RESULT 507  
 ADR75907  
 ID ADR75907 standard; DNA; 19 BP.  
 AC ADR75907;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 392.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0459612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 392; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 763 GTGATCGCTTCAAGCCCAT 781  
 Db 1 GTGATCGCTTCAAGCCCAT 19

RESULT 508  
 ADR75908  
 ID ADR75908 standard; DNA; 19 BP.  
 XX  
 XX ADR75909;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 394.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 394; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 804 GCTCTCATCAAGGCATCA 822  
 Db 1 GCTCTCATCAAGGCATCA 19

RESULT 509  
 ADR75983  
 ID ADR75983 standard; DNA; 19 BP.  
 XX AC ADR75983;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 468.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 468; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 10 A; 2 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2415 AAAGATTGGAATCCAAAG 2433  
 Db 1 AAAGATTGGAATCCAAAG 19  
 |||||

RESULT 510  
 ADR75998  
 ID ADR75998 standard; DNA; 19 BP.  
 XX  
 AC ADR75998;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 483.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR  
 PR 14-APR-2003; 2003US-0462894P.  
 PR  
 PR 17-APR-2003; 2003US-0463772P.  
 PR  
 PR 25-APR-2003; 2003US-0465665P.  
 PR  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 FI  
 XX WPI; 2004-677362/66.  
 DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 483; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2668 AAATATCTTCATCTGGAGT 2686  
 Db 1 AAATATCTTCATCTGGAGT 19  
 |||||

RESULT 511  
 ADR76006  
 ID ADR76006 standard; DNA; 19 BP.  
 XX  
 AC ADR76006;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 491.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
PI
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 491; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nucleic acid sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispensed or administered a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2876 CCTAAAGCTGGGAAGCTG 2894
Db 1 CCTAAAGCTGGGAAGCTG 19
RESULT 512
ADR76020
ID ADR76020 standard; DNA; 19 BP.

```

ADR76020;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 505.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 505; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nucleic acid sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispensed or administered a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2876 CCTAAAGCTGGGAAGCTG 2894

Db 1 CCTAAAGCTGGGAAGCTG 19

RESULT 512

ADR76020

ID ADR76020 standard; DNA; 19 BP.

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3511 GTTTGCAAGCAGAGCCAG 3529  
 Db 1 GTTTGCAAGCAGAGCCAG 19

RESULT 513  
 ADR76024  
 ID ADR76024 standard; DNA; 19 BP.  
 AC ADR76024;

XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 509.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.

XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US007070.

XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.

XX  
 PI Manoharan M, Bumcrot D;

XX  
 DR WPI; 2004-677362/66.

XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 XX Example 5; SEQ ID NO 509; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use, and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3587 TGCTACAGCTTATGGCTCC 3605  
 Db 1 TGCTACAGCTTATGGCTCC 19

RESULT 514  
 ADR76026  
 ID ADR76026 standard; DNA; 19 BP.  
 AC ADR76026;

XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 511.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.

XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US007070.

XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.

XX  
 PI Manoharan M, Bumcrot D;

XX  
 DR WPI; 2004-677362/66.

XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

```

PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 511; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3610 TTTCGAAGGGTGGCATG 3628
DB 1 TTTCGAAGGGTGGCATG 19
RESULT 515
ID ADR76062
ID ADR76062 standard; DNA; 19 BP.
XX
AC ADR76062;
XX
XX 16-DEC-2004 (first entry)

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XX Human apolipoprotein B (ApoB) oligonucleotide seqid 547.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 547; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

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CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4660 CTGCGCGGCTCAATGGAGA 4678  
 Db 1 CTGCGCGGCTCAATGGAGA 19

RESULT 516  
 ADR76065  
 ID ADR76065 standard; DNA; 19 BP.  
 XX  
 AC ADR76065;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 550.

XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-04659612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 550; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4828 AGCTGACTTTAAATCTGA 4846  
 Db 1 AGCTGACTTTAAATCTGA 19

RESULT 517  
 ADR76271  
 ID ADR76271 standard; DNA; 19 BP.  
 XX  
 AC ADR76271;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 756.  
 XX  
 KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 756; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2231 GGAAGCTCTTTTGGGAAG 2249
XX |||||
XX 1 GGAAGCTCTTTTGGGAAG 19
XX
XX RESULT 518
XX ADR76272
XX ID ADR76272 standard; DNA; 19 BP.
XX
XX AC ADR76272;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 757.
XX
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

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cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 757; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2384 TGGAAATAATGCTCAGTCTT 2402
DB 1 TGGAAATAATGCTCAGTCTT 19

RESULT 519
ADNR76302
ID ADR76302 standard; DNA; 19 BP.
XX AC ADR76302;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 787.
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX DR WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 787; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

```

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 GCTGAGGAGCCGCCCCAGC 66  
DB 1 GCTGAGGAGCCGCCCCAGC 19

RESULT 520  
ADNR76304  
ID ADR76304 standard; DNA; 19 BP.  
XX AC ADR76304;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 789.  
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454285P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX PA (ALNY-) ALNYLAM PHARM.  
XX PI Manoharan M, Bumcrot D;  
XX DR WPI; 2004-677362/66.  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 787; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described

```

PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 789; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 7 C; 10 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 73 GGGCCGCGAGGCCGAGGCC 91
|||||
Db 1 GGGCCGCGAGGCCGAGGCC 19
RESULT 521
ID ADR76326
XX ADR76326 standard; DNA; 19 BP.
XX
XX ADR76326;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 811.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

09-MAY-2003; 2003US-0465802P.

08-AUG-2003; 2003US-0469612P.

11-AUG-2003; 2003US-0493986P.

26-SEP-2003; 2003US-0494597P.

09-OCT-2003; 2003US-0506341P.

10-OCT-2003; 2003US-0510246P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 811; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 2 A; 7 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 73 GGGCCGCGAGGCCGAGGCC 91  
|||||

Db 1 GGGCCGCGAGGCCGAGGCC 19

RESULT 521

ID ADR76326

XX ADR76326 standard; DNA; 19 BP.

XX

XX ADR76326;

XX

XX 16-DEC-2004 (first entry)

XX

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 811.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD;

Query Match 0.1%; Score 19; DB 1; Length 19;

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Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

Qy 494 TGCTGCAGCCATGTCACAGG 512
Db 1 TGCTGCAGCCATGTCACAGG 19

RESULT 522
AD76330
ID ADR76330 standard; DNA; 19 BP.
XX
AC ADR76330;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 815.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 815; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where

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the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 538 AAGGGAAGCAGGTTTCCT 556
Db 1 AAGGGAAGCAGGTTTCCT 19

RESULT 523
AD76345
ID ADR76345 standard; DNA; 19 BP.
XX
AC ADR76345;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 830.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 815; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where

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PR 07-NOV-2003; 2003US-0518453P.
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX DR WPI; 2004-677362/66.
XX
XX XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 830; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 697 TTACCGTCAAGCAGGAGAA 715
Db 1 TTACCGTCAAGCAGGAGAA 19

RESULT 524
ADR76348
ID ADR76348 standard; DNA; 19 BP.
XX
XX AC ADR76348;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 833.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX
XX FN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX XX 07-MAR-2003; 2003US-0452682P.
XX
XX PR 12-MAR-2003; 2003US-0454265P.
XX
XX PR 13-MAR-2003; 2003US-0454962P.
XX
XX PR 13-MAR-2003; 2003US-0455050P.
XX
XX PR 14-APR-2003; 2003US-0462894P.
XX
XX PR 17-APR-2003; 2003US-0463772P.
XX
XX PR 25-APR-2003; 2003US-0465665P.
XX
XX PR 25-APR-2003; 2003US-0465802P.
XX
XX PR 09-MAY-2003; 2003US-0469612P.
XX
XX PR 08-AUG-2003; 2003US-0493986P.
XX
XX PR 11-AUG-2003; 2003US-0494597P.
XX
XX PR 26-SEP-2003; 2003US-0506341P.
XX
XX PR 09-OCT-2003; 2003US-0510246P.
XX
XX PR 10-OCT-2003; 2003US-0510318P.
XX
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX DR WPI; 2004-677362/66.
XX
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 833; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 6 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 710 GAGGAAGGGCAGATGGCA 728

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Db      ||||| 1 GAGGAGGCCAATGTGCA 19
RESULT 525
ADR76352
ID      ADR76352 standard; DNA; 19 BP.
XX
AC      ADR76352;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 837.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
FN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0452894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
XX
PS      Example 5; SEQ ID NO 837; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 788 AGGCATCAGCCCACTTGCT 806  
|||||  
DB 1 AGGCATCAGCCCACTTGCT 19

RESULT 526  
ADR76366  
ID ADR76366 standard; DNA; 19 BP.  
XX  
AC ADR76366;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 851.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0452894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX  
PS Example 5; SEQ ID NO 837; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)



RESULT 528  
 ADR76395  
 ID ADR76395 standard; DNA; 19 BP.  
 AC ADR76395;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 880.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 880; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1619 AACCATGGAGCAGTAACT 1637  
 Db 1 AACCATGGAGCAGTAACT 19  
 RESULT 529  
 ADR76405  
 ID ADR76405 standard; DNA; 19 BP.  
 XX  
 AC ADR76405;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 890.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 880; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 890; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1744 AGGACCAGGAGGTTCTTCT 1762

DB 1 AGGACCAGGAGGTTCTTCT 19

RESULT 530

ADNR76415  
 ID ADNR76415 standard; DNA; 19 BP.

XX AC ADNR76415;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 900.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 900; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1887 GAGCAAGTGAAGAACTTTG 1905

DB 1 GAGCAAGTGAAGAACTTTG 19

RESULT 531

ADNR76422

ID ADNR76422 standard; DNA; 19 BP.

XX

AC ADR76422;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 907.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0456655P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 907; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1918 TTGCCAATATCTTGAATC 1936  
 DB 1 TTGCCAATATCTTGAATC 19  
 RESULT 532  
 ADR76423  
 ID ADR76423 standard; DNA; 19 BP.  
 XX  
 XX AC ADR76423;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 908.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0456655P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 907; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

PS Example 5; SEQ ID NO 908; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1944 TTGGATATCCAGATCTGA 1962

DB 1 TTGGATATCCAGATCTGA 19

RESULT 533

ADNR76437

ID ADNR76437 standard; DNA; 19 BP.

XX

AC ADNR76437;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 922.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosolic; anticoagulant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

FN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

PA

XX Manoharan M, Bumcrot D;

XX

PI WPT; 2004-677362/66.

XX

DR

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 922; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 6 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2201 CTTGGAGGAAAGGCTTT 2219

DB 1 CTTGGAGGAAAGGCTTT 19

RESULT 534

ADNR76446

ID ADNR76446 standard; DNA; 19 BP.

XX

AC ADNR76446;

XX

DT 16-DEC-2004 (first entry)

XX

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2201 CTTGGAGGAAAGGCTTT 2219

DB 1 CTTGGAGGAAAGGCTTT 19

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 931.

XX anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 931; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 5 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 66+02; 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2257 TTTTCCGACAGCTGTCAA 2275

DB 1 TTTTCCGACAGCTGTCAA 19

RESULT 535

ADR76460

ID ADR76460 standard; DNA; 19 BP.

XX

AC ADR76460;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 945.

XX

KW anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 945; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2426 ATCCAAAGAGTCCGGAA 2444  
|||||  
Db 1 ATCCAAAGAGTCCGGAA 19

RESULT 536

ID ADR76495  
AD ADR76495 standard; DNA; 19 BP.

AC ADR76495;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 980.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 980; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2999 TGAGAACAGGCGAGTCCTGG 3017  
|||||

Db 1 TGAGAACAGGCGAGTCCTGG 19

RESULT 537

AD ADR76499

ID ADR76499 standard; DNA; 19 BP.

AC ADR76499;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 984.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 984; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3130 TAGAGCTGGAGGAGGCC 3148  
DB 1 TAGAGCTGGAGGAGGCC 19  
RESULT 538  
ADR76779  
ID ADR76779 standard; DNA; 19 BP.  
XX  
XX ADR76779;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1264.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1264; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2476 AGCTTGGTTTTCAGCTCT 2494

Db 1 AGCTTGGTTTTCAGCTCT 19

RESULT 539

ADR76884

ID ADR76884 standard; DNA; 19 BP.

AC ADR76884;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1369.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465655P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1369; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2178 TCAGCTGACCTCATCGAGA 2196

Db 1 TCAGCTGACCTCATCGAGA 19

RESULT 540

ADR76904

ID ADR76904 standard; DNA; 19 BP.

AC ADR76904;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1389.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1389; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3023 TTGCAAGCAAGTCTTTCCT 3041  
 |||||  
 Db 1 TTGCAAGCAAGTCTTTCCT 19  
 RESULT 541  
 ADR77271  
 ID ADR77271 standard; DNA; 19 BP.  
 XX  
 AC ADR77271;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 1756.  
 XX  
 KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1756; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3562 AACTGCTTCTCCAAATGGA 3580  
 DB 1 AACTGCTTCTCCAAATGGA 19  
 RESULT 542  
 ADR77323  
 ID ADR77323 standard; DNA; 19 BP.  
 XX  
 AC ADR77323;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1808.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0465612P.  
 PR 08-AUG-2003; 2003US-0493988P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 1808; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 9 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3543 GCCCAGTGTGCGCTGCCA 3561  
 DB 1 GCCCAGTGTGCGCTGCCA 19  
 RESULT 543  
 ADR77324  
 ID ADR77324 standard; DNA; 19 BP.  
 XX  
 AC ADR77324;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1809.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PF 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 DA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1809; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

Db 1 TTTGAGCCCAATTGGAAG 19  
 RESULT 544  
 ADR77401  
 ID ADR77401 standard; DNA; 19 BP.  
 XX ADR77401;  
 AC ADR77401;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1886.  
 DE  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 DA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1809; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0;

QY 1930 TGAACCTCAGAGAAATTGGA 1948  
 Db 1 TGAACCTCAGAGAAATTGGA 19  
 |||||

RESULT 545

ADR77507

ID ADR77507 standard; DNA; 19 BP.

AC ADR77507;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1992.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510319P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX PI

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX

XX Example 5; SEQ ID NO 1992; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX

XX Sequence 19 BP; 2 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4101 TCTGTGGGATTCCATCTGC 4119  
 Db 1 TCTGTGGGATTCCATCTGC 19  
 |||||

XX

XX RESULT 546

XX ADR77534

XX ID ADR77534 standard; DNA; 19 BP.

XX

XX ADR77534;

XX

XX 16-DEC-2004 (first entry)

XX

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2019.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

XX Homo sapiens.

XX OS

XX WO2004080406-A2.

XX

XX

PD 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 2019; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4166 TCAACTGCAAGTGCCTCTC 4184  
Db 1 TCAACTGCAAGTGCCTCTC 19  
RESULT 547

ADR77542  
ID ADR77542 standard; DNA; 19 BP.  
XX  
AC ADR77542;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2027.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 2027; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4166 TCAACTGCAAGTGCCTCTC 4184  
Db 1 TCAACTGCAAGTGCCTCTC 19  
RESULT 547



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4313 TGTGGTTGACCTGCTTCC 4331  
 DB 1 TGTGGTTGACCTGCTTCC 19  
 RESULT 548  
 ADR77545  
 ID ADR77545 standard; DNA; 19 BP.  
 XX  
 AC ADR77545;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2030.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Mancharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2030; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4329 TCCTACAAATGTCGAAGGAT 4347

DB 1 TCCTACAAATGTCGAAGGAT 19

RESULT 549

ADR77549

ID ADR77549 standard; DNA; 19 BP.

XX

AC ADR77549;

DT 16-DEC-2004 (first entry)

XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2034.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2034; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4416 TTTCTAGATTGGAATATCA 4434
XX |||||
XX DB 1 TTTCTAGATTGGAATATCA 19
XX
XX RESULT 550
XX ADR77574
XX ID ADR77574 standard; DNA; 19 BP.
XX
XX AC ADR77574;

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16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 2059.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2034; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4416 TTTCTAGATTGGAATATCA 4434

|||||

DB 1 TTTCTAGATTGGAATATCA 19

RESULT 550

ADR77574

ID ADR77574 standard; DNA; 19 BP.

XX

AC ADR77574;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 4973 TTCTGGATCACTAAATTC 4991  
 |||||  
 DB 1 TTCTGGATCACTAAATTC 19

RESULT 551

AD78135  
 ID ADR78135 standard; DNA; 19 BP.

XX AC ADR78135;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2620.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-MAR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2620; 378pp; English.  
 PS

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4117 TGCCATCTCGAGAGTTCCA 4135

|||||  
 DB 1 TGCCATCTCGAGAGTTCCA 19

RESULT 552

AD78165

ID ADR78165 standard; DNA; 19 BP.

XX AC ADR78165;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2650.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2650; 378pp; English.
XX
XX The invention describes a RNA interference (irna) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 689 CACTCACCTTTACCGTCAAG 707
Db 1 CACTCACCTTTACCGTCAAG 19
RESULT 553
ADR78172
ID ADR78172 standard; DNA; 19 BP.
XX
XX ADR78172;
AC
XX
XX 16-DEC-2004 (first entry)
DT
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2657.

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antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic; cytostatic; anticonvulsant; nootropic; musclic; anti-HIV; RNA interference; irna; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2650; 378pp; English.

The invention describes a RNA interference (irna) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 689 CACTCACCTTTACCGTCAAG 707

Db 1 CACTCACCTTTACCGTCAAG 19

RESULT 553

ADR78172

ID ADR78172 standard; DNA; 19 BP.

XX

XX ADR78172;

AC

XX

XX 16-DEC-2004 (first entry)

DT

XX

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2657.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1227 TTGCCACAGCTGATTGAGG 1245  
 DB 1 TTGCCACAGCTGATTGAGG 19

RESULT 554

ADR78177

ID ADR78177 standard; DNA; 19 BP.

XX ADR78177;

AC ADR78177;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2662.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2662; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1756 TTCTCTTCAGACTTCCT 1774

DB 1 TTCTCTTCAGACTTCCT 19

RESULT 555

ADR78184

ID ADR78184 standard; DNA; 19 BP.

XX ADR78184;

AC ADR78184;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2669.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2669; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2579 CAGGAGGGCTCAAGAAT 2597  
 Db 1 CAGGAGGGCTCAAGAAT 19  
 |||||  
 RESULT 556  
 ADR78187  
 ID ADR78187 standard; DNA; 19 BP.  
 XX  
 AC ADR78187;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2672.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2672; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2579 CAGGAGGGCTCAAGAAT 2597  
 Db 1 CAGGAGGGCTCAAGAAT 19  
 |||||  
 RESULT 556  
 ADR78187  
 ID ADR78187 standard; DNA; 19 BP.  
 XX  
 AC ADR78187;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2672.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2590 CAAAGATGACTTTTCT 2608
DB 1 CAAAGATGACTTTTCT 19

RESULT 557
AD78200
ID ADR78200 standard; DNA; 19 BP.
XX
AC ADR78200;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2685.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Buncrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2685; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4563 TTGTTTGTCAAGAGTCA 4581
DB 1 TTGTTTGTCAAGAGTCA 19

RESULT 558
AD78234
ID ADR78234 standard; DNA; 19 BP.
XX
AC ADR78234;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2719.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Buncrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2685; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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QY 1886 TGAGCAAGTGAAGAACTTT 1904  
 |||||  
 Db 1 TGAGCAAGTGAAGAACTTT 19

RESULT 560  
 ADR78253  
 ID ADR78253 standard; DNA; 19 BP.  
 XX  
 AC ADR78253;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2738.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2738; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or Glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SQ Sequence 19 BP; 0 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 27 GTGCCCTTCTCGGTGCTG 45

Db 1 GTGCCCTTCTCGGTGCTG 19

RESULT 561

ADR78260

ID ADR78260 standard; DNA; 19 BP.

XX

AC ADR78260;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2745.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

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PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2745; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 315 GGAGTCCCTGGGACTGCTG 333
Db 1 GGAGTCCCTGGGACTGCTG 19
XX
RESULT 562
AD78289
ID AD78289 standard; DNA; 19 BP.
XX
XX AD78289;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2774.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticorvulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.

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XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 03-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2774; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1447 CCACCTTGATGCGCTGAG 1465
Db 1 CCACCTTGATGCGCTGAG 19

```

RESULT 563  
 ADR78317  
 ID ADR78317 standard; DNA; 19 BP.  
 AC ADR78317;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2802.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2802; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 4 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 ATATCTTCATCTGGAGTCA 2688

Db 1 ATATCTTCATCTGGAGTCA 19

RESULT 564

ADR78323

ID ADR78323 standard; DNA; 19 BP.

XX

AC ADR78323;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2808.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

XX (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 2808; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3303 ACCTGTGTCAGTGAAGTCC 3321  
|||||  
Db 1 ACCTGTGTCAGTGAAGTCC 19

RESULT 565  
ADR78324  
ID ADR78324 standard; DNA; 19 BP.

XX ADR78324;  
XX  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2809.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.

08-MAR-2004; 2004WO-US0007070.

07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454265P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery  
disease, diabetes, cancer or neurological disease, comprises sense  
sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2809; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
sense sequence and an antisense sequence, where the sense sequences have  
one or more asymmetrical 2'-O alkyl modifications, the antisense  
sequences have one or more asymmetrical phosphorothioate modifications  
and the antisense sequence targets a human gene sequence. Also described  
are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
levels or glucose-6-phosphate levels in a subject; producing (I);  
stabilising (I), involves selecting a sequence with activity and  
introducing one or more asymmetrical modification in the sequence, where  
the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

3310 CCAGTGAAGTCCAAATTC 3328  
|||||  
1 CCAGTGAAGTCCAAATTC 19

RESULT 566  
ADR78333

ID ADR78333 standard; DNA; 19 BP.  
 AC ADR78333;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2818.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2818; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3821 AGTTGCAATGAGCTCATGG 3839  
 Db 1 AGTTGCAATGAGCTCATGG 19  
 RESULT 567  
 ADR78335  
 ID ADR78335 standard; DNA; 19 BP.  
 XX  
 AC ADR78335;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2820.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2818; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

```

PT sequence and antisense sequence which has specific modifications.
PS Example 5; SEQ ID NO 2820; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 3902 GAAGGAGTTCACCTCCAG 3920
Db 1 GAAGGAGTTCACCTCCAG 19
XX
RESULT 568
AD78339
ID AD78339 standard; DNA; 19 BP.
XX
AC AD78339;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2824.
XX
XX antilipemic; cadiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; RNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2824; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 0 A; 4 C; 5 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 4021 TTCCTTTGCCTTTTGGTGG 4039
Db 1 TTCCTTTGCCTTTTGGTGG 19
XX
XX RESULT 569
XX AD78532
XX ID AD78532 standard; DNA; 19 BP.
XX
XX AC AD78532;
XX
XX

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DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3017.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX WO2004080406-A2.

PN

PN 23-SEP-2004.

PD

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454982P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

XX Example 5; SEQ ID NO 3017; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 1 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e-02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 CTTCTGCGCTTTCTCTCTAC 944

Db 1 CTTCTGCGCTTTCTCTCTAC 19

RESULT 570

ADR78552

ID ADR78552 standard; DNA; 19 BP.

XX

AC ADR78552;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3037.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

PN

PN 23-SEP-2004.

PD

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454982P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

XX Example 5; SEQ ID NO 3017; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1258 TCACCTTACAGCCTTGCT 1276

DB 1 TCACCTTACAGCCTTGCT 19

RESULT 571

ADR78556

ID ADR78556 standard; DNA; 19 BP.

XX ADR78556;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3041.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 28-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3041; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 7 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1490 GACAAACCCCTACAGGACC 1508

DB 1 GACAAACCCCTACAGGACC 19

RESULT 572

ADR78573

ID ADR78573 standard; DNA; 19 BP.

XX ADR78573;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3058.

DE





CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2216 CTTTGAGCCCAACATTGGAA 2234  
 Db 1 CTTTGAGCCCAACATTGGAA 19

RESULT 574  
 ADR78603  
 ID ADR78603 standard; DNA; 19 BP.  
 AC ADR78603;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3088.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3088; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2550 GGGATCCCCCAGATGATTG 2568  
 Db 1 GGGATCCCCCAGATGATTG 19

RESULT 575  
 ADR78609  
 ID ADR78609 standard; DNA; 19 BP.  
 AC ADR78609;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3094.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.



CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3432 ACTGAGTTCGCCCTCATGG 3450  
 |||||  
 Db 1 ACTGAGTTCGCCCTCATGG 19

RESULT 577  
 ADDR78658  
 ID ADDR78658 standard; DNA; 19 BP.  
 AC ADDR78658;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3143.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3143; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3925 TGGGATTGCCAGACTTCCA 3943  
 |||||  
 Db 1 TGGGATTGCCAGACTTCCA 19

RESULT 578  
 ADDR78674  
 ID ADDR78674 standard; DNA; 19 BP.  
 AC ADDR78674;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3159.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3159; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification while not decreasing its  
 CC the modification decreases nucleic acid sensitivity for its use; and a device  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4390 CATGTGATGGGTCTCTACG 4408  
 |||||  
 Db 1 CATGTGATGGGTCTCTACG 19

## RESULT 579

ADR78870

ID ADR78870 standard; DNA; 19 BP.

XX

AC ADR78870;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3355.

XX

KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytoskeletal; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

Manoharan M, Bumcrot D;

XX

WPI; 2004-677362/66.

XX

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3355; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a

sense sequence and an antisense sequence, where the sense sequences have

one or more asymmetrical 2'-O alkyl modifications, the antisense

sequences have one or more asymmetrical phosphorothioate modifications

and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

levels or glucose-6-phosphatase levels in a subject; producing (I);

stabilising (I), involves selecting a sequence with activity and

introducing one or more asymmetrical modification in the sequence, where

the modification decreases nucleic acid sensitivity while not decreasing its

activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is

that can be dispense or administer a composition comprising (I). (I) is

useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 301 CTGAGAGTTCAGTGGAGT 319  
 Db 1 CTGAGAGTTCAGTGGAGT 19  
 |||||

RESULT 580  
 ID ADR78878 standard; DNA; 19 BP.  
 XX ADR78878;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3363.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3363; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1186 CTGAGCTGAGAGGCTTCAG 1204  
 Db 1 CTGAGCTGAGAGGCTTCAG 19  
 |||||

RESULT 581  
 ADR78891  
 ID ADR78891 standard; DNA; 19 BP.  
 XX ADR78891;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3376.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX



CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 414 CAGTGCACCTGAAAGAGG 432  
 Db 1 CAGTGCACCTGAAAGAGG 19  
 |||||

RESULT 583  
 ADR78949  
 ID ADR78949 standard; DNA; 19 BP.  
 AC ADR78949;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3434.  
 XX  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485665P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.

XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

XX  
 XX Example 5; SEQ ID NO 3434; 378pp; English.

XX  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 565 AGAAGATGAACCTACTTA 583  
 Db 1 AGAAGATGAACCTACTTA 19  
 |||||

RESULT 584  
 ADR78968  
 ID ADR78968 standard; DNA; 19 BP.  
 XX  
 AC ADR78968;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3453.  
 DE  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
PI
XX
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3453; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 713 GAAGGGCAATGTGGCAACA 731
Db 1 GAAGGGCAATGTGGCAACA 19
RESULT 585
ADR78973
ID ADR78973 standard; DNA; 19 BP.

```

ADR78973;  
 16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3458.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3453; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 875 GGACGCTAAGAGGAGCAT 893  
 Db 1 GGACGCTAAGAGGAGCAT 19

RESULT 586  
 ADR79007  
 ID ADR79007 standard; DNA; 19 BP.  
 XX AC ADR79007;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3492.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465865P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3492; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, statin-resistant  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1509 CAGGAGCTGCTGGACATTG 1527  
 Db 1 CAGGAGCTGCTGGACATTG 19

RESULT 587  
 ADR79049  
 ID ADR79049 standard; DNA; 19 BP.  
 XX AC ADR79049;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3534.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3534; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 1 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2089 AAATAGAGGGGAATCTTAT 2107  
 |||||  
 DB 1 AAATAGAGGGGAATCTTAT 19

RESULT 588

ADR79071

ID ADR79071 standard; DNA; 19 BP.

XX ADR79071;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3556.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3556; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2384 TGGAAATAATGCTCAGTGT 2402  
 |||||  
 DB 1 TGGAAATAATGCTCAGTGT 19

RESULT 589  
 ADR79102  
 ID ADR79102 standard; DNA; 19 BP.  
 XX  
 AC ADR79102;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3587.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0489612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 (ALNY-) ALNYLAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3587; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2844 TTCCACGAGTCGGTCTGG 2862  
 |||||  
 DB 1 TTCCACGAGTCGGTCTGG 19

RESULT 590  
 ADR79104  
 ID ADR79104 standard; DNA; 19 BP.  
 XX  
 AC ADR79104;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3589.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 XX  
 (ALNY-) ALNYLAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3587; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3589; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2853 TCGGGTCTGGAGGCTCATG 2871
XX |||||
XX 1 TCGGGTCTGGAGGCTCATG 19
XX
XX RESULT 591
XX ADR79117
XX ID ADR79117 standard; DNA; 19 BP.
XX AC ADR79117;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3602.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

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cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3602; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3130 TAGAGCTGGAAGCTGAGGCC 3148
Db 1 TAGAGCTGGAAGCTGAGGCC 19

RESULT 592
ADR79170
ID ADR79170 standard; DNA; 19 BP.
XX AC ADR79170;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3655.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 14-MAR-2003; 2003US-0455050P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-045802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 11-AUG-2003; 2003US-0493986P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX DR
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS
XX PS Example 5; SEQ ID NO 3655; 378pp; English.
XX CC
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4188 GGTGTCTAGACCTCTCCA 4206
Db 1 GGTGTCTAGACCTCTCCA 19

RESULT 593
ADR79184
ID ADR79184 standard; DNA; 19 BP.
XX AC ADR79184;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3669.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 14-MAR-2003; 2003US-0455050P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3669; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qv 4416 TTTCTAGATTGGAATATCA 4434
Db 1 TTTCTAGATTGGAATATCA 19
XX
XX RESULT 594
XX ID ADR79204
XX ID ADR79204 standard; DNA; 19 BP.
XX
XX AC ADR79204;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3689.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3689; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

4416 TTTCTAGATTGGAATATCA 4434

1 TTTCTAGATTGGAATATCA 19

RESULT 594

ADR79204

ADR79204 standard; DNA; 19 BP.

ADR79204;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 3689.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD;

Query Match

0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4803 GCTTCCCTAAAGTATGAGA 4821  
 |||||  
 DB 1 GCTTCCCTAAAGTATGAGA 19

RESULT 595  
 ADR79593  
 ID ADR79593 standard; DNA; 19 BP.  
 XX  
 AC ADR79593;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4085.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4085; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2734 TGCAGGCTGAACCTGGTGGC 2752  
 |||||  
 DB 1 TGCAGGCTGAACCTGGTGGC 19

RESULT 596  
 ADR79660  
 ID ADR79660 standard; DNA; 19 BP.  
 XX  
 AC ADR79660;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4154.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4085; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4154; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4935 CAGGCTGATTACGATCAT 4953
Db 1 CAGGCTGATTACGATCAT 19
RESULT 597
ADR79746
ID ADR79746 standard; DNA; 19 BP.
XX
XX ADR79746;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4240.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyrostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; aa.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4240; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1299 TCCACTCAGATCTCCAGT 1317

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Db      1 TCCACTCACATCTCTCCAGT 19
|||||
RESULT 598
ADR79766
ID      ADR79766 standard; DNA; 19 BP.
XX
AC      ADR79766;
XX
DT      16-DEC-2004 (first entry)
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 4260.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 4260; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I); involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 2744 ACTGTTGGCAAAACCTCC 2762  
|||||  
Db 1 ACTGTTGGCAAAACCTCC 19

RESULT 599  
ADR79842  
ID ADR79842 standard; DNA; 19 BP.  
XX  
AC ADR79842;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4336.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4260; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I); involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

```

PI Manoharan M, Bumcrot D;
DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4336; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2295 AATGTCAGTTCCTGATG 2313
Db 1 AATGTCAGTTCCTGATG 19
RESULT 600
ADR79849
ID ADR79849 standard; DNA; 19 BP.
XX
AC ADR79849;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4343.
XX
KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.

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XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4343; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3498 ATTTCATACCCCGTTTGC 3516
Db 1 ATTTCATACCCCGTTTGC 19

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RESULT 601  
 ADR79870  
 ID ADR79870 standard; DNA; 19 BP.  
 XX  
 AC ADR79870;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4366.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4366; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4582 AGATTGATGGCAGTTTCAG 4600  
 DB 1 AGATTGATGGCAGTTTCAG 19  
 RESULT 602  
 ADR80252  
 ID ADR80252 standard; DNA; 19 BP.  
 XX  
 AC ADR80252;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4749.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4366; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4749; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2692 CTCCTGGAGCCAGGCTGG 2710

DB 1 CTCCTGGAGCCAGGCTGG 19

RESULT 603

ADR80289

ID ADR80289 standard; DNA; 19 BP.

XX ADR80289;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4786.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4786; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 2 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4550 AAAGAAACAGCATTTGTTT 4568

DB 1 AAAGAAACAGCATTTGTTT 19

RESULT 604

ADR80373

ID ADR80373 standard; DNA; 19 BP.

XX

AC ADR80373;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4870.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4870; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 6 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1988 AGAATCTCAACTTCCAACCT 2006  
 Db 1 AGAATCTCAACTTCCAACCT 19  
 RESULT 605  
 ADR80444  
 ID ADR80444 standard; DNA; 19 BP.  
 XX  
 XX ADR80444;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 4941.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4870; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 4941; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3202 AGGACAGAGCCTTGTTGGA 3220
DB 1 AGGACAGAGCCTTGTTGGA 19
RESULT 606
ADR80499
ID ADR80499 standard; DNA; 19 BP.
XX
AC ADR80499;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4996.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 4996; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4745 TGGAACCCCTCCCTCACC 4763
DB 1 TGGAACCCCTCCCTCACC 19
RESULT 607
ADR80736
ID ADR80736 standard; DNA; 19 BP.
XX
AC ADR80736;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5235.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

PT

PS Example 5; SEQ ID NO 5235; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2477 GCTTGGTTTGGCCAGTCTC 2495

Db 1 GCTTGGTTTGGCCAGTCTC 19

RESULT 608

ADR75522

ID ADR75522 standard; DNA; 19 BP.

XX

AC ADR75522;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 7.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

PT

PS Example 5; SEQ ID NO 7; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 2 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 374 GGAGTTCCTCCAGCTCTGC 392  
Db 1 GGAGTTCCTCCAGCTCTGC 19

## RESULT 609

ID ADR75535  
XX ADR75535 standard; DNA; 19 BP.  
AC ADR75535;  
XX  
DT 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 20.  
DE  
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX Homo sapiens.  
OS  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
PF  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465669P.

25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 20; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1747 ACCAGGAGGTTCTTCTTCA 1765  
Db 1 ACCAGGAGGTTCTTCTTCA 19

## RESULT 610

ADR75552  
ID ADR75552 standard; DNA; 19 BP.  
XX  
XX ADR75552;  
AC ADR75552;  
XX  
DT 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 37.  
DE  
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 37; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1139 CTCTGAGCAAAATATCCAG 1157  
 |||||  
 DB 1 CTCTGAGCAAAATATCCAG 19  
 RESULT 611  
 ADR75612  
 ID ADR75612 standard; DNA; 19 BP.  
 XX  
 AC ADR75612;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 97.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 97; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2418 GATTTGAATCCAAAGAAG 2436  
 DB 1 GATTTGAATCCAAAGAAG 19  
 |||||

RESULT 612  
 ADR75620  
 ID ADR75620 standard; DNA; 19 BP.  
 XX  
 AC ADR75620;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 105.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 105; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2448 AGAGCCTACTCCGCATCT 2466  
 DB 1 AGAGCCTACTCCGCATCT 19  
 |||||

RESULT 613  
 ADR75672  
 ID ADR75672 standard; DNA; 19 BP.  
 XX  
 AC ADR75672;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 157.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 157; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1473 GTCAACAACACTATCATAAGA 1491  
 Db 1 GTCAACAACACTATCATAAGA 19  
 RESULT 614  
 ADR75693  
 ID ADR75693 standard; DNA; 19 BP.  
 XX  
 AC ADR75693;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 178.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 178; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.

XX Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2385 GGAATAATGCTCAGTGTG 2403  
 Db 1 GGAATAATGCTCAGTGTG 19

RESULT 615

ADR75695

ID ADR75695 standard; DNA; 19 BP.

XX AC ADR75695;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 180.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 180; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control apoB gene expression.

XX Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2552 GATCCCCCAGATGATTGGA 2570

Db 1 GATCCCCCAGATGATTGGA 19

RESULT 616

ADR75701

ID ADR75701 standard; DNA; 19 BP.

XX AC ADR75701;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 186.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0452894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 186; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e-02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX 2991 GCTGAAGTTTATCATTCT 2909  
 XX |||||||||||||||||||

Db 1 GCTGAAGTTTATCATTCT 19  
 RESULT 617  
 ADR75705  
 ID ADR75705 standard; DNA; 19 BP.  
 XX ADR75705;  
 AC ADR75705;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 190.  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 190.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 186; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e-02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX 2991 GCTGAAGTTTATCATTCT 2909  
 XX |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0;

QY 3303 ACCTTGTCAGTGAAGTCC 3321  
Db 1 ACCTTGTCAGTGAAGTCC 19

RESULT 618  
ADR75710  
ID ADR75710 standard; DNA; 19 BP.  
AC ADR75710;  
XX  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 195.  
XX  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 195; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 7 A; 1 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0;

QY 3627 TGGCATTATGATGAAGAGA 3645  
Db 1 TGGCATTATGATGAAGAGA 19

RESULT 619  
ADR75722  
ID ADR75722 standard; DNA; 19 BP.  
AC ADR75722;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 207.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 207; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 Best Match 0.1%; Score 19; DB 1; Length 19;  
 Query Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4097 CAAGTCTGTGGGATTCAT 4115  
 Db 1 CAAGTCTGTGGGATTCAT 19  
 RESULT 620

ADR75724  
 ID ADR75724 standard; DNA; 19 BP.  
 XX ADR75724;  
 AC ADR75724;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 209.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyotostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS XX  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 209; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 0 A; 6 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4177 TGCCCTCTCTCTGGGTGTTCT 4195  
 Db 1 TGGCTCTCTCTGGGTGTTCT 19  
 RESULT 621  
 ADR75864  
 ID ADR75864 standard; DNA; 19 BP.  
 XX  
 AC ADR75864;  
 DT  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 349.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465668P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 349; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4417 TTCTAGATTGGAATATCAA 4435  
 Db 1 TTCTAGATTGGAATATCAA 19

RESULT 622  
 ADR75878

ID ADR75878 standard; DNA; 19 BP.

XX  
 AC ADR75878;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 363.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 363; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological diseases (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 20 GGGCTGAGTGGCCTTCTCG 38
XX |||||
XX Db 1 GGGCTGAGTGGCCTTCTCG 19
XX
XX RESULT 623
XX ID ADR75879
XX ID ADR75879 standard; DNA; 19 BP.
XX
XX AC ADR75879;

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XX
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 364.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN W02004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 364; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological diseases (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 20 GGGCTGAGTGGCCTTCTCG 38
XX |||||
XX Db 1 GGGCTGAGTGGCCTTCTCG 19
XX
XX RESULT 623
XX ID ADR75879
XX ID ADR75879 standard; DNA; 19 BP.
XX
XX AC ADR75879;

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 21 GGCTGAGTGCCTTCTCGG 39  
 |||||  
 Db 1 GGCTGAGTGCCTTCTCGG 19

# RESULT 624

AD75881  
 ID ADR75881 standard; DNA; 19 BP.  
 XX  
 AC ADR75881;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 366.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX The invention describes a RNA interference (irRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 TCTCGGTGCTGCGCTGA 52  
 |||||  
 Db 1 TCTCGGTGCTGCGCTGA 19

# RESULT 625

AD75886  
 ID ADR75886 standard; DNA; 19 BP.  
 XX  
 AC ADR75886;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 371.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.

Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 366; 378pp; English.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 371; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 301 CTGAGAGTTCAGTGGAGT 319  
 Db 1 CTGAGAGTTCAGTGGAGT 19  
 RESULT 626  
 ADR75903  
 ID ADR75903 standard; DNA; 19 BP.  
 XX  
 AC ADR75903;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 388.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 388; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 301 CTGAGAGTTCAGTGGAGT 319  
 Db 1 CTGAGAGTTCAGTGGAGT 19  
 RESULT 626  
 ADR75903  
 ID ADR75903 standard; DNA; 19 BP.  
 XX  
 AC ADR75903;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 388.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 719 CAATGTGGCAACAGAAATA 737

DB 1 CAATGTGGCAACAGAAATA 19

RESULT 627

ID ADR75918 standard; DNA; 19 BP.

XX ADR75918;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 403.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 403; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1012 ACAGCCGCTTCTTTGGTGA 1030

DB 1 ACAGCCGCTTCTTTGGTGA 19

RESULT 628

ADNR75943

ID ADR75943 standard; DNA; 19 BP.

XX ADR75943;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 428.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
PA Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 428; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity, a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
XX Best Match 0.1%; Score 19; DB 1; Length 19;  
XX Query Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1620 ACCATGGAGCAGTTAACTC 1638  
Db 1 ACCATGGAGCAGTTAACTC 19  
RESULT 629  
AD75945  
ID AD75945 standard; DNA; 19 BP.  
XX AC AD75945;  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (ApoB) oligonucleotide seqid 430.  
DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 09-MAY-2003; 2003US-0465802P.  
PR 08-AUG-2003; 2003US-0469612P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
PA Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 430; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity, a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
XX Best Match 0.1%; Score 19; DB 1; Length 19;  
XX Query Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1620 ACCATGGAGCAGTTAACTC 1638  
Db 1 ACCATGGAGCAGTTAACTC 19  
RESULT 629  
AD75945  
ID AD75945 standard; DNA; 19 BP.  
XX AC AD75945;  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (ApoB) oligonucleotide seqid 430.  
DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1639 CAGAACTCAAGCTTCAAT 1657
DB 1 CAGAACTCAAGCTTCAAT 19

RESULT 630
ID ADR75951
XX ADR75951 standard; DNA; 19 BP.
AC ADR75951;
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 436.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 436; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.

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Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1806 GCTGCCCTATCTTATGTTGA 1824

DB 1 GCTGCCCTATCTTATGTTGA 19

RESULT 631

ADR75954

ID ADR75954 standard; DNA; 19 BP.

XX ADR75954;

XX ADR75954;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 439.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.





QY 2738 GGCTGAACGTGGTGGCAAAA 2756  
 |||||  
 Db 1 GGCTGAACGTGGTGGCAAAA 19

RESULT 633  
 ADR76001  
 ID ADR76001 standard; DNA; 19 BP.  
 XX  
 AC ADR76001;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 486.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465912P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 486; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2768 TGTGGAGTTTGTGACAAAT 2786  
 |||||  
 Db 1 TGTGGAGTTTGTGACAAAT 19

RESULT 634  
 ADR76016  
 ID ADR76016 standard; DNA; 19 BP.  
 XX  
 AC ADR76016;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 501.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465912P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX



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CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral diseases (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. NO. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 3642 GAGAAGATTGAATTGAAT 3660
Db 1 GAGAAGATTGAATTGAAT 19

RESULT 637
ADR76033
ID ADR76033 standard; DNA; 19 BP.
XX
AC ADR76033;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 518.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX
XX Example 5; SEQ ID NO 516; 378bp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 518; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3668 AGGCACCAATGATAGTACC 3686  
|||||  
Db 1 AGGCACCAATGATAGTACC 19

RESULT 638  
ADR76043  
ID ADR76043 standard; DNA; 19 BP.

XX ADR76043;  
AC ADR76043;  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (ApoB) oligonucleotide seqid 528.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosolic; anticoagulant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
OS  
XX WO2004080406-A2.  
PN  
XX 23-SEP-2004.  
PD

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 528; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4025 TTTCCTTTTGGTGGCAA 4043  
|||||  
Db 1 TTTCCTTTTGGTGGCAA 19

RESULT 639  
ADR76048

ID ADR76048 standard; DNA; 19 BP.  
 AC ADR76048;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 533.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0508341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 533; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No.6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4122 TCTCGAGAGTTCCCAAGTCC 4140  
 Db 1 TCTCGAGAGTTCCCAAGTCC 19  
 RESULT 640  
 ADR76063  
 ID ADR76063 standard; DNA; 19 BP.  
 XX  
 AC ADR76063;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 548.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0508341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

```

PT sequence and antisense sequence which has specific modifications.
PS Example 5; SEQ ID NO 548; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 10 A; 1 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4723 AGATAACAGGAGATATGA 4741
DB 1 AGATAACAGGAGATATGA 19
|||||
RESULT 641
ADNR76252
ID ADNR76252 standard; DNA; 19 BP.
XX
AC ADNR76252;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 737.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
12-MAR-2003; 2003US-0454265P.
13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
Manoharan M, Bumcrot D;
WPI; 2004-677362/66.
Interference RNA agent useful for treating dyslipidemias, coronary artery
disease, diabetes, cancer or neurological disease, comprises sense
sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 737; 378pp; English.
The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 301 CTGAGAGTTCAGTGGAGT 319
DB 1 CTGAGAGTTCAGTGGAGT 19
|||||
RESULT 642
ADNR76262
ID ADNR76262 standard; DNA; 19 BP.
XX
AC ADNR76262;
XX
XX

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DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 747.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 747; 378pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1450 CCTTGTATGCGCTGAGCCA 1468  
 |||||  
 Db 1 CCTTGTATGCGCTGAGCCA 19

## RESULT 643

ADR76267

ID ADR76267 standard; DNA; 19 BP.

XX

AC ADR76267;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 752.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 752; 378pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1820 GTTCATGAGGAGTCCTTCA 1838  
 Db |||||  
 1 GTTCATGAGGAGTCCTTCA 19

RESULT 644  
 ADR76270  
 ID ADR76270 standard; DNA; 19 BP.  
 XX AC ADR76270;  
 XX AC ADR76270;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 755.  
 XX KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 755; 378pp; English.  
 XX PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2094 GAAGGGAATCTTATTTG 2112  
 Db |||||  
 1 GAAGGGAATCTTATTTG 19

RESULT 645  
 ADR76318  
 ID ADR76318 standard; DNA; 19 BP.  
 XX AC ADR76318;  
 XX AC ADR76318;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 803.  
 XX



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Buncrot D;  
 XX  
 XX DR WPI; 2004-677362/66.  
 XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 803; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 409 CCAGCCAGTGCACCTGAA 427  
 |||||

Db 1 CCAGCCAGTGCACCTGAA 19

RESULT 646

ADR76362

ID ADR76362 standard; DNA; 19 BP.

XX ADR76362;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 847.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 847; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 964 TAGCACAAAGTGACACAGAC 982  
 Db |||||  
 1 TAGCACAAAGTGACACAGAC 19

RESULT 647  
 ADR76374  
 ID ADR76374 standard; DNA; 19 BP.  
 XX  
 AC ADR76374;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 859.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 859; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 4 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1140 TCTGAGCAAAATATCCAGA 1158  
 Db |||||  
 1 TCTGAGCAAAATATCCAGA 19

RESULT 648  
 ADR76377  
 ID ADR76377 standard; DNA; 19 BP.  
 XX  
 AC ADR76377;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 862.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 862; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1208 TGAAGCAGTCACATCTCTC 1226  
 Db 1 TGAAGCAGTCACATCTCTC 19

RESULT 649  
 ADR76385  
 ID ADR76385 standard; DNA; 19 BP.  
 XX  
 XX ADR76385;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 870.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 862; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1395 GCACGACGCTGCCGAGAGA 1413  
 |||||  
 DB 1 GCACGACGCTGCCGAGAGA 19

RESULT 650  
 ADR76388  
 ID ADR76388 standard; DNA; 19 BP.  
 XX  
 AC ADR76388;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 873.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT  
 PT Example 5; SEQ ID NO 873; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 5 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1488 AAGACAAACCCCTACAGGGA 1506  
 |||||  
 DB 1 AAGACAAACCCCTACAGGGA 19

RESULT 651  
 ADR76398  
 ID ADR76398 standard; DNA; 19 BP.  
 XX  
 AC ADR76398;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 883.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 883; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1637 TCCAGAACTCAAGTCTTCA 1655  
 |||||  
 Db 1 TCCAGAACTCAAGTCTTCA 19  
 RESULT 652  
 ADR76401  
 ID ADR76401 standard; DNA; 19 BP.  
 XX AC ADR76401;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 886.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 886; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1683 CCATCACTGATGATCCAGA 1701  
 Db 1 CCATCACTGATGATCCAGA 19

RESULT 653  
 ADR76403  
 ID ADR76403 standard; DNA; 19 BP.  
 XX  
 AC ADR76403;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 888.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemiae, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 888; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1698 CAGAAAGCTGCCATCCAGG 1716  
 Db 1 CAGAAAGCTGCCATCCAGG 19

RESULT 654  
 ADR76442  
 ID ADR76442 standard; DNA; 19 BP.  
 XX  
 AC ADR76442;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 927.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 PF  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 927; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2225 AACATTGGAAGCTCTTTT 2243  
 |||||  
 DB 1 AACATTGGAAGCTCTTTT 19

RESULT 655  
 ADR76472  
 ID ADR76472 standard; DNA; 19 BP.  
 XX  
 AC ADR76472;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 957.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 927; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX





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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 976; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2949 ACATTACATTGGTCTCTA 2967
DB 1 ACATTACATTGGTCTCTA 19
|||||
RESULT 658
ADR76516
ID ADR76516 standard; DNA; 19 BP.

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XX AC ADR76516;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1001.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1001; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 11 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3464 TGACACAAAGGAGAAAGA 3482  
 Db 1 TGACACAAAGGAGAAAGA 19

RESULT 659  
 ADR76650  
 ID ADR76650 standard; DNA; 19 BP.  
 XX AC ADR76650;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1135.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX W02004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1135; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 9 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4762 CCTCCACCTCTGATCTGCA 4780  
 Db 1 CCTCCACCTCTGATCTGCA 19

RESULT 660  
 ADR76686  
 ID ADR76686 standard; DNA; 19 BP.  
 XX AC ADR76686;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1171.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX W02004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0469862P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1171; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 0 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4730 AGGAGATGATGAGATGCA 4748
XX Db 1 AGGAAGATGAGATGCA 19
XX
XX RESULT 661
XX ADR76716
XX ID ADR76716 standard; DNA; 19 BP.
XX
XX AC ADR76716;
XX
XX DT 16-DEC-2004 (first entry)

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Human apolipoprotein B (ApoB) oligonucleotide seqid 1201.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452692P.

12-MAR-2003; 2003US-0454285P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 1201; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4730 AGGAGATGATGAGATGCA 4748

Db 1 AGGAAGATGAGATGCA 19

RESULT 661

ADR76716

ID ADR76716 standard; DNA; 19 BP.

XX

AC ADR76716;

XX

DT 16-DEC-2004 (first entry)

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4935 CAGGCTGATTACGAGTCAT 4953

Db 1 CAGGCTGATTACGAGTCAT 19

RESULT 662

ADR76882

AD R76882 standard; DNA; 19 BP.

XX ADR76882;

AC ADR76882;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1367.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

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CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 9 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 84 CCGAGGCCAGGCCGAGCC 102

Db 1 CCGAGGCCAGGCCGAGCC 19

RESULT 663

ADR77077

ID ADR77077 standard; DNA; 19 BP.

XX ADR77077;

AC ADR77077;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1562.

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Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 1367; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a

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PR 25-APR-2003; 2003US-0456665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1562; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4743 GATGGAACCCCTCCCTCA 4761
XX |||||
XX Db 1 GATGGAACCCCTCCCTCA 19
XX
XX RESULT 664
XX ADR77305
XX ID ADR77305 standard; DNA; 19 BP.
XX
XX AC ADR77305;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1790.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

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KW KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1790; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.

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```

XX SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1235 GCTGATTGAGGTGTCACG 1253
Db 1 GCTGATTGAGGTGTCACG 19

RESULT 665
ADNR77330
ID ADR77330 standard; DNA; 19 BP.
XX AC
XX ADNR77330;
DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1815.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX DR WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 1815; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

```

```

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1303 CTCACATCTCTCCAGTGGCT 1321
Db 1 CTCACATCTCTCCAGTGGCT 19

RESULT 666
ADNR77379
ID ADR77379 standard; DNA; 19 BP.
XX AC
XX ADNR77379;
DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1864.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX DR WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 1815; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

```

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1864; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred.No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1377 CTGATCCCGAGCCCTCAG 1395
XX |||||
XX Db 1 CTGATCCCGAGCCCTCAG 19
XX
XX RESULT 667
XX ADR78161
XX ID ADR78161 standard; DNA; 19 BP.
XX
XX AC ADR78161;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2646.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 2646; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.  
 Sequence 19 BP; 3 A; 9 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1377 CTGATCCCGAGCCCTCAG 1395  
 |||||  
 Db 1 CTGATCCCGAGCCCTCAG 19  
 RESULT 667  
 ADR78161  
 ID ADR78161 standard; DNA; 19 BP.  
 AC ADR78161;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2646.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;

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Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 466 TGAAGAAACCAAGAACTC 484
Db 1 TGAAGAAACCAAGAACTC 19

RESULT 668
ADR78261
ID ADR78261 standard; DNA; 19 BP.
AC ADR78261;
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2746.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 14-APR-2003; 2003US-0455050P.
XX
XX 17-APR-2003; 2003US-0462894P.
XX
XX 25-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2746; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where

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CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 323 TGGGACTGCTGATTCAAGA 341
Db 1 TGGGACTGCTGATTCAAGA 19

RESULT 669
ADR78316
ID ADR78316 standard; DNA; 19 BP.
XX
XX ADR78316;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2801.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 14-APR-2003; 2003US-0455050P.
XX
XX 17-APR-2003; 2003US-0462894P.
XX
XX 25-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2746; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where

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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2801; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2637 GAACCTCCCACTGGAGCTG 2655
DB 1 GAACCTCCCACTGGAGCTG 19
RESULT 670
ADR78328
ID ADR78328 standard; DNA; 19 BP.
AC ADR78328;
XX
XX 16-DEC-2004 (first entry)
DT
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2813.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2813; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 1 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3627 TGGCATTATGATGAGAGA 3645

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Db      1 TGGCATTATGATGAAGAGA 19
|||||
RESULT 671
ADR78330
ID   ADR78330 standard; DNA; 19 BP.
AC   ADR78330;
XX
XX
DT   16-DEC-2004 (first entry)
DE   Human apolipoprotein B (ApoB) oligonucleotide seqid 2815.
KW   antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX
OS   Homo sapiens.
XX
XX
FN   WO2004080406-A2.
XX
XX
PD   23-SEP-2004.
XX
XX
PF   08-MAR-2004; 2004WO-US007070.
XX
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
XX
PI   Manoharan M, Bumcrot D;
XX
XX
WPI; 2004-677362/66.
XX
XX
PT   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
XX
PS   Example 5; SEQ ID NO 2815; 378pp; English.
XX
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
CC   and the antisense sequence targets a human gene sequence. Also described
CC   are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC   levels or glucose-6-phosphatase levels in a subject; producing (I);
CC   stabilising (I), involves selecting a sequence with activity and
CC   introducing one or more asymmetrical modification in the sequence, where
CC   the modification decreases nuclease sensitivity while not decreasing its
CC   activity; a kit comprising (I) and instruction for its use; and a device
CC   that can be dispense or administer a composition comprising (I). (I) is
CC   useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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CC   is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC   The subject is suffering from a disorder characterised by elevated or
CC   otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC   levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC   disorder is chosen from the HDL/LDL cholesterol imbalance,
CC   dyslipidaemias, hypercholesterolaemia, statin-resistant
CC   hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC   disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC   inhibit hepatic glucose production or for treating glucose-metabolism-
CC   related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC   treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC   lung cancer), neurological disease (e.g., Huntington disease or
CC   spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC   represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC   can be used to control ApoB gene expression.
XX
SQ   Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY   3691 AAATGACTTCCAAATTTCCC 3709
DB   1 AAATGACTTCCAAATTTCCC 19
|||||
RESULT 672
ADR78344
ID   ADR78344 standard; DNA; 19 BP.
XX
XX
AC   ADR78344;
XX
XX
DT   16-DEC-2004 (first entry)
DE   Human apolipoprotein B (ApoB) oligonucleotide seqid 2829.
XX
XX
KW   antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX
OS   Homo sapiens.
XX
XX
FN   WO2004080406-A2.
XX
XX
PD   23-SEP-2004.
XX
XX
PF   08-MAR-2004; 2004WO-US007070.
XX
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
XX
PI   Manoharan M, Bumcrot D;
XX
XX
WPI; 2004-677362/66.
XX
XX
PT   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
XX
PS   Example 5; SEQ ID NO 2815; 378pp; English.
XX
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
CC   and the antisense sequence targets a human gene sequence. Also described
CC   are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC   levels or glucose-6-phosphatase levels in a subject; producing (I);
CC   stabilising (I), involves selecting a sequence with activity and
CC   introducing one or more asymmetrical modification in the sequence, where
CC   the modification decreases nuclease sensitivity while not decreasing its
CC   activity; a kit comprising (I) and instruction for its use; and a device
CC   that can be dispense or administer a composition comprising (I). (I) is
CC   useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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PI Manoharan M, Bumcrot D;
DR WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2829; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4261 CCAGCACAGACCAATTTCAG 4279
DB 1 CCAGCACAGACCAATTTCAG 19
RESULT 673
ADR78347
ID ADR78347 standard; DNA; 19 BP.
XX
AC ADR78347;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2832.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.

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XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2832; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4515 CCACAGATGTCGCTTCAG 4533
DB 1 CCACAGATGTCGCTTCAG 19

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RESULT 674
ID  ADR78348 standard; DNA; 19 BP.
XX
AC  ADR78348;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 2833.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
XX  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
PA  (ALNY-) ALNYLAM PHARM.
XX
PI  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
XX  disease, diabetes, cancer or neurological disease, comprises sense
XX  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 2833; 379pp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
XX  sense sequence and an antisense sequence, where the sense sequences have
XX  one or more asymmetrical 2'-O alkyl modifications, the antisense
XX  sequences have one or more asymmetrical phosphorothioate modifications
XX  and the antisense sequence targets a human gene sequence. Also described
XX  are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX  levels or glucose-6-phosphatase levels in a subject; producing (I);
XX  stabilising (I), involves selecting a sequence with activity and
XX  introducing one or more asymmetrical modification in the sequence, where
XX  the modification decreases nuclease sensitivity while not decreasing its
XX  activity; a kit comprising (I) and instruction for its use; and a device
XX  that can be dispense or administer a composition comprising (I). (I) is
XX  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX  The subject is suffering from a disorder characterised by elevated or
XX  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX  levels of cholesterol, and/or dysregulation of lipid metabolism. The

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disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4538 TTTGGACTCCAAAAGAAA 4556  
 |||||  
 DB 1 TTTGGACTCCAAAAGAAA 19

RESULT 675  
 ADR78350  
 ID ADR78350 standard; DNA; 19 BP.  
 XX  
 AC ADR78350;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2835.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2833; 379pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 2835; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4816 ATGAGACTACGAGCTGAC 4834

Db 1 ATGAGACTACGAGCTGAC 19

RESULT 676

AD78466  
 ID ADR78466 standard; DNA; 19 BP.

XX AC ADR78466;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2951.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2951; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 0 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 27 GTGCCCTTCGCTTGCTG 45

Db 1 GTGCCCTTCGCTTGCTG 19

RESULT 677

ADR78472

ID ADR78472 standard; DNA; 19 BP.

XX

AC ADR78472;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2957.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2957; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1220 ATCTCTTGGCCACAGCTG 1238  
 Db 1 ATCTCTTGGCCACAGCTG 19  
 RESULT 678  
 ADR78473  
 ID ADR78473 standard; DNA; 19 BP.  
 XX  
 XX ADR78473;  
 AC  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2958.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2957; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 2958; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1221 TCTCTCTTGGCCACAGCTGA 1239
DB 1 TCTCTCTTGGCCACAGCTGA 19
RESULT 679
ADR78480
ID ADR78480 standard; DNA; 19 BP.
XX
AC ADR78480;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2965.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2965; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3638 TGAAGAGAAGATTGAATTT 3656
DB 1 TGAAGAGAAGATTGAATTT 19
RESULT 680
ADR78503
ID ADR78503 standard; DNA; 19 BP.
XX
AC ADR78503;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2988.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2988; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 237 CTGGTCTGTCCTCCAAAGATG 255  
 |||||  
 Db 1 CTGGTCTGTCCTCCAAAGATG 19  
 RESULT 681  
 ADR78531  
 ID ADR78531 standard; DNA; 19 BP.  
 XX  
 AC ADR78531;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3016.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3016; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant, hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 903 GCCATCTGCAGGAGCAAC 921

Db 1 GCCATCTGCAGGAGCAAC 19

RESULT 682

ADR78548

ID ADR78548 standard; DNA; 19 BP.

XX ADR78548;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3033.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cyostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3033; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant, hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Query Match 0.1%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 6e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1220 ATCTCTCTTGCACAGCTG 1238

Db 1 ATCTCTCTTGCACAGCTG 19

RESULT 683

ADR78561

ID ADR78561 standard; DNA; 19 BP.

XX ADR78561;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3046.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3046; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1620 ACCATGGAGCAGTTAACTC 1638  
 |||||  
 Db 1 ACCATGGAGCAGTTAACTC 19

RESULT 684

ADR78604

ID ADR78604 standard; DNA; 19 BP.

XX

AC ADR78604;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3089.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3089; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 0 G; 10 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2603 TTTTCTTCACTACATCTTC 2621  
 DB 1 TTTTCTTCACTACATCTTC 19  
 RESULT 685  
 ADR78610  
 ID ADR78610 standard; DNA; 19 BP.  
 XX  
 AC ADR78610;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3095.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485665P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3095; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2635 TTGAACCTCCCACTGGAGC 2653  
 DB 1 TTGAACCTCCCACTGGAGC 19  
 RESULT 686  
 ADR78616  
 ID ADR78616 standard; DNA; 19 BP.  
 XX  
 AC ADR78616;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3101.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485665P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3101; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolemia, statin-resistant  
 CC hypercholesterolemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2668 AAATATCTTCATCTGGAGT 2686  
 |||||  
 Db 1 AAATATCTTCATCTGGAGT 19  
 RESULT 687  
 ADR78627  
 ID ADR78627 standard; DNA; 19 BP.  
 XX  
 AC ADR78627;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3112.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3112; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolemia, statin-resistant  
 CC hypercholesterolemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3218 GGATACCTCGAAGTTTGTGA 3236  
 DB 1 GGATACCTCGAAGTTTGTGA 19  
 RESULT 688  
 ADR78637  
 ID ADR78637 standard; DNA; 19 BP.  
 XX  
 AC ADR78637;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3122.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493988P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3122; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 1 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3496 TTATTTCCATACCCCGTTT 3514  
 DB 1 TTATTTCCATACCCCGTTT 19  
 RESULT 689  
 ADR78645  
 ID ADR78645 standard; DNA; 19 BP.  
 XX  
 AC ADR78645;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3130.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3130; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 5 A; 4 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3613 CCAAGAGGGTGGCATGGCA 3631  
 ||||||||||||||||

Db 1 CCAAGAGGGTGGCATGGCA 19  
 RESULT 690  
 ADR78646  
 ID ADR78646 standard; DNA; 19 BP.  
 XX ADR78646;  
 AC ADR78646;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3131.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3131; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3621 GTGGCATGCGCATTTATGATG 3639

Db 1 GTGGCATGCGCATTTATGATG 19

RESULT 691

ADR78866

ID ADR78866 standard; DNA; 19 BP.

XX ADR78866;

AC ADR78866;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3351.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX

PN

PD

PF

PR

PR

PR

PR

PR

PR

PR

PR

PR

XX

DR

XX

PT

PT

XX

PS

XX

CC

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WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3351; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4561 ATTGTTTGTCAAGAAGT 4579

Db 1 ATTGTTTGTCAAGAAGT 19

RESULT 692

ADR78876

ID ADR78876 standard; DNA; 19 BP.

XX ADR78876;

AC ADR78876;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3361.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN

PD

PF

PR

PR

PR

PR

PR





CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1450 CCTGTATGCGCTGAGCCA 1468  
 |||||  
 Db 1 CCTGTATGCGCTGAGCCA 19

RESULT 694  
 ADR78918  
 ID ADR78918 standard; DNA; 19 BP.  
 XX  
 AC ADR78918;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3403.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0489612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PF Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3403; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 2 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 9 CGGACCTGCGGGCTGAG 27  
 |||||  
 Db 1 CGGACCTGCGGGCTGAG 19

RESULT 695  
 ADR78975  
 ID ADR78975 standard; DNA; 19 BP.  
 XX  
 AC ADR78975;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3460.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3460; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 913 AGGAGCAACCTCTTCT 931
Db 1 AGGAGCAACCTCTTCT 19
RESULT 696
ADR78991
ID ADR78991 standard; DNA; 19 BP.
XX
XX ADR78991;
AC

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XX
DT 16-DEC-2004 (First entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3476.
DE
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3476; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1124 GAATAAACTAACCACTCT 1142  
 DB 1 GAATAAACTAACCACTCT 19

RESULT 697

ID ADR78997 standard; DNA; 19 BP.

XX AC ADR78997;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3482.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3482; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1222 CTCCTCTGCCACAGCTCAT 1240

DB 1 CTCCTCTGCCACAGCTCAT 19

RESULT 698

AD79021

ID ADR79021 standard; DNA; 19 BP.

XX AC ADR79021;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3506.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 28-SEP-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3506; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1698 CAGAAAGCTGCCATCCAGG 1716
Db 1 CAGAAAGCTGCCATCCAGG 19
|||||
RESULT 699
AD79052
ID AD79052 standard; DNA; 19 BP.
XX
AC AD79052;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3537.

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antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 28-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 07-NOV-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3537; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2111 TGATCCAAATAACTACCTT 2129  
 |||||  
 DB 1 TGATCCAAATAACTACCTT 19

## RESULT 700

ID ADR79080

AD79080 standard; DNA; 19 BP.

XX AC ADR79080;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3565.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.

XX FN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 3565; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2448 AGAGCCTACCTCCGCATCT 2466

|||||  
 DB 1 AGAGCCTACCTCCGCATCT 19

## RESULT 701

AD79087

ID ADR79087 standard; DNA; 19 BP.

XX AC ADR79087;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3572.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX FN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454285P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3572; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I) and  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX Qy 2511 CTGGGAAAGCTGCTTCTGA 2529  
XX |||||  
XX Db 1 CTGGGAAAGCTGCTTCTGA 19  
XX  
XX RESULT 702  
XX ADR79096  
XX ID ADR79096 standard; DNA; 19 BP.  
XX  
XX AC ADR79096;  
XX  
XX XX 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3581.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3581; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I) and  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX Qy 2511 CTGGGAAAGCTGCTTCTGA 2529  
XX |||||  
XX Db 1 CTGGGAAAGCTGCTTCTGA 19  
XX  
XX RESULT 702  
XX ADR79096  
XX ID ADR79096 standard; DNA; 19 BP.  
XX  
XX AC ADR79096;  
XX  
XX XX 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3581.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TGGAGTAAACTGGGAAGTA 2726
Db 1 TGGAGTAAACTGGGAAGTA 19

RESULT 703
ADR79097
ID ADR79097 standard; DNA; 19 BP.
XX
AC ADR79097;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3582.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
PI Manoharan M, Buncrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3582; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2720 GGAAGTAGCCCAACATGCAG 2738
Db 1 GGAAGTAGCCCAACATGCAG 19

RESULT 704
ADR79099
ID ADR79099 standard; DNA; 19 BP.
XX
AC ADR79099;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3584.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
PI Manoharan M, Buncrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3582; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX XX WPI; 2004-677362/66.
XX
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 3584; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Oy 2777 TGTGACAAATATGGGCATC 2795
Db 1 TGTGACAAATATGGGCATC 19
|||||
RESULT 705
AD79126
ID AD79126 standard; DNA; 19 BP.
XX
XX AC AD79126;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3611.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CHD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX XX 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454562P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 03-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX XX WPI; 2004-677362/66.
XX
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 3611; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 3315 GAGTCCAAATTCGGATT 3333  
 Db 1 GAGTCCAAATTCGGATT 19

RESULT 706  
 ADR79142  
 ID ADR79142 standard; DNA; 19 BP.  
 XX  
 AC ADR79142;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3627.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3627; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3550 GGTCGCTGCCAAACTGCT 3569

Db 1 GGTCGCTGCCAAACTGCT 19

RESULT 707

ADR79145

ID ADR79145 standard; DNA; 19 BP.

XX

AC ADR79145;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3630.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

```

PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3630; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3588 GCTACAGCTTATGCTCCA 3606
Db 1 GCTACAGCTTATGCTCCA 19
RESULT 708
AD79157
ID AD79157 standard; DNA; 19 BP.
XX
XX AD79157;
XX
XX
XX 16-DEC-2004 (first entry)
DT
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3642.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.

```

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XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3642; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3965 AAAAAGCGATGCGCGGTC 3983
Db 1 AAAAAGCGATGCGCGGTC 19

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RESULT 709  
 ADR79166  
 ID ADR79166 standard; DNA; 19 BP.  
 XX  
 AC ADR79166;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3651.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3651; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4085 AGCCCTCCACTTCAAGTCT 4103

Db 1 AGCCCTCCACTTCAAGTCT 19

RESULT 710

ADR79199

ID ADR79199 standard; DNA; 19 BP.

XX

AC ADR79199;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3684.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

PN

XX 23-SEP-2004.

PD

XX 08-MAR-2004; 2004WO-US007070.

PF

XX 07-MAR-2003; 2003US-0452682P.

PR

XX 12-MAR-2003; 2003US-0454265P.

PR

XX 13-MAR-2003; 2003US-0454962P.

PR

XX 13-MAR-2003; 2003US-0455050P.

PR

XX 14-APR-2003; 2003US-0462894P.

PR

XX 17-APR-2003; 2003US-0463772P.

PR

XX 25-APR-2003; 2003US-0465665P.

PR

XX 25-APR-2003; 2003US-0465802P.

PR

XX 09-MAY-2003; 2003US-0469612P.

PR

XX 08-AUG-2003; 2003US-0493986P.

PR

XX 11-AUG-2003; 2003US-0494597P.

PR

XX 26-SEP-2003; 2003US-0506341P.

PR

XX 09-OCT-2003; 2003US-0510246P.

PR

XX 10-OCT-2003; 2003US-0510318P.

PR

XX 07-NOV-2003; 2003US-0518453P.

PR

XX (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

```

DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
PS
PS Example 5; SEQ ID NO 3684; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 4678 AGTCAACCTGAGGTTTAA 4696
Db 1 AGTCAACCTGAGGTTTAA 19
RESULT 711
AD79825
ID AD79825 standard; DNA; 19 BP.
XX
XX AC AD79825;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4319.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-Hiv;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 28-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
DR
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
PS
PS Example 5; SEQ ID NO 4319; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 9 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy -85 CGAGGCCAGGCCGAGCCC 103
Db 1 CGAGGCCAGGCCGAGCCC 19

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RESULT 712
ADR79851

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ID ADR79851 standard; DNA; 19 BP.  
 AC ADR79851;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4345.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX  
 PS Example 5; SEQ ID NO 4345; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1905 GTGGCTTCCCATATTGCCA 1923  
 Db 1 GTGGCTTCCCATATTGCCA 19  
 RESULT 713  
 ADR79860  
 ID ADR79860 standard; DNA; 19 BP.  
 XX  
 AC ADR79860;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4356.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 4356; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral diseases (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. NO. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3822 GTTGCAATGAGCTCATGGC 3840
DB 1 GTTGCAATGAGCTCATGGC 19
RESULT 714
ADNR79909
ID ADNR79909 standard; DNA; 19 BP.
XX
AC ADNR79909;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4405.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
12-MAR-2003; 2003US-0454265P.
13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4405; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral diseases (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. NO. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4982 ACTAATATCCCATGGTCTT 5000
DB 1 ACTAATATCCCATGGTCTT 19
RESULT 715
ADNR79934
ID ADNR79934 standard; DNA; 19 BP.
XX
AC ADNR79934;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. NO. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4982 ACTAATATCCCATGGTCTT 5000
DB 1 ACTAATATCCCATGGTCTT 19
RESULT 715
ADNR79934
ID ADNR79934 standard; DNA; 19 BP.
XX
AC ADNR79934;
XX

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DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4430.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4430; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instructions for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3625 CATGCCATTATGATGAAGA 3643

Db 1 CATGCCATTATGATGAAGA 19

RESULT 716

ADR79961

ID ADR79961 standard; DNA; 19 BP.

XX ADR79961;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4457.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4457; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4221 AACTGTACAACTGTCGG 4239  
 Db | | | | | | | | | | | | | | | | | | | | | |  
 1 AACTGTACAACTGTCGG 19

RESULT 717  
 ADR80394  
 ID ADR80394 standard; DNA; 19 BP.  
 XX AC ADR80394;  
 XX AC ADR80394;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4891.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 03-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR XX  
 DR XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4891; 378bp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2686 TCATTGCTCCCGAGGCCAA 2704  
 Db | | | | | | | | | | | | | | | | | | | | | |  
 1 TCATTGCTCCCGAGGCCAA 19

RESULT 718  
 ADR80432  
 ID ADR80432 standard; DNA; 19 BP.  
 XX AC ADR80432;  
 XX AC ADR80432;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4929.



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4929; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4817 TGAGAACTACGAGCTGACT 4835  
 |||||  
 Db 1 TGAGAACTACGAGCTGACT 19

RESULT 719  
 ADR75533

ID ADR75533 standard; DNA; 19 BP.

XX ADR75533;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 18.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 18; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 4561 ATTTGTTGTCAAGAAGT 4579  
Db 1 ATTTGTTGTCAAGAAGT 19  
RESULT 720  
ADR75537  
ID ADR75537 standard; DNA; 19 BP.  
AC ADR75537;  
XX  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (ApoB) oligonucleotide seqid 22.  
DE  
DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; RNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
PA Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 22; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 3588 GCTACAGCTTATGGCTCCA 3606  
Db 1 GCTACAGCTTATGGCTCCA 19  
RESULT 721  
ADR75546  
ID ADR75546 standard; DNA; 19 BP.  
XX  
XX ADR75546;  
XX  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (ApoB) oligonucleotide seqid 31.  
DE  
DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; RNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW

coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PE 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 31; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 4 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 633 GAGACAGAGAAGCCCAAGC 651  
 Db 1 GAGACAGAGAAGCCCAAGC 19  
 RESULT 722  
 ADR75637  
 ID ADR75637 standard; DNA; 19 BP.  
 XX  
 AC ADR75637;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 122.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PE 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 122; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 0 A; 7 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 172 CTGGCTGCTGCTGCTGCT 190  
|||||  
Db 1 CTGGCTGCTGCTGCTGCT 19

RESULT 723  
ADR75642  
ID ADR75642 standard; DNA; 19 BP.  
XX  
AC ADR75642;  
XX  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 127.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 127; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 2 A; 5 C; 8 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 315 GGAGTCCCTGGGACTGCTG 333  
|||||  
Db 1 GGAGTCCCTGGGACTGCTG 19

RESULT 724  
ADR75659  
ID ADR75659 standard; DNA; 19 BP.  
XX  
AC ADR75659;  
XX  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 144.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-045265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 144; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 696 TTTACCGTCAAGACGAGCA 714  
 Db 1 TTTACCGTCAAGACGAGCA 19  
 RESULT 725  
 ADR75671  
 ID ADR75671 standard; DNA; 19 BP.  
 XX AC ADR75671;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 156.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 156; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1447 CCACCTTGATGCGCTGAG 1465  
 Db 1 CCACCTTGATGCGCTGAG 19  
 RESULT 726  
 ADR75676  
 ID ADR75676 standard; DNA; 19 BP.  
 XX  
 AC ADR75676;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 161.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 161; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1638 CCAGAACTCAAGTCTTCAA 1656  
 Db 1 CCAGAACTCAAGTCTTCAA 19  
 RESULT 727  
 ADR75679  
 ID ADR75679 standard; DNA; 19 BP.  
 XX  
 AC ADR75679;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 164.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

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PN WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Buncrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 164; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1888 AGCAAGTGAAGAACTTTCT 1906
XX Db 1 AGCAAGTGAAGAACTTTCT 19

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RESULT 728  
 ADR75682  
 ID ADR75682 standard; DNA; 19 BP.  
 XX  
 AC ADR75682;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 167.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Buncrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 164; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 1888 AGCAAGTGAAGAACTTTCT 1906  
 Db 1 AGCAAGTGAAGAACTTTCT 19

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2069 ACTTGACCCAGCTCAGCC 2087  
 Db 1 ACTTGACCCAGCTCAGCC 19

## RESULT 729

AD75732  
 ID ADR75732 standard; DNA; 19 BP.

XX AC ADR75732;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 217.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 XX RNA interference; RNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0456656P.

XX 29-APR-2003; 2003US-045802P.

XX 05-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 217; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4816 ATGAGAACTACGAGCTGAC 4834

Db 1 ATGAGAACTACGAGCTGAC 19

## RESULT 730

AD75735  
 ID ADR75735 standard; DNA; 19 BP.

XX AC ADR75735;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 220.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 XX RNA interference; RNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 220; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4857 AAGTATAAGAACTTGGCCA 4875
XX
XX Db 1 AAGTATAAGAACTTGGCCA 19
XX
XX RESULT 731
XX ADR75853
XX ID ADR75853 standard; DNA; 19 BP.

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XX AC ADR75853;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 338.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticovulstant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 338; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4857 AAGTATAAGAACTTGGCCA 4875
XX
XX Db 1 AAGTATAAGAACTTGGCCA 19
XX
XX RESULT 731
XX ADR75853
XX ID ADR75853 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1105 TGAAGACTCTCCAGGAAC 1123  
 DB 1 TGAAGACTCTCCAGGAAC 19

RESULT 732  
 ADR75932  
 ID ADR75932 standard; DNA; 19 BP.  
 XX  
 AC ADR75932;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 417.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 417; 378pp; English.  
 PS The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1228 TGCCACAGCTGATTGAGGT 1246  
 DB 1 TGCCACAGCTGATTGAGGT 19

RESULT 733  
 ADR75933  
 ID ADR75933 standard; DNA; 19 BP.  
 XX  
 AC ADR75933;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 418.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

```

PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 418; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1229 GCCACAGCTGATTGAGGNG 1247
XX DB 1 GCCACAGCTGATTGAGGTG 19
XX
XX RESULT 734
XX ADR75937
XX ID ADR75937 standard; DNA; 19 BP.
XX
XX AC ADR75937;
XX
XX 16-DEC-2004 (first entry)

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XX Human apolipoprotein B (ApoB) oligonucleotide seqid 422.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454982P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 422; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1450 CCTGTATGCGCTGAGCCA 1468  
 |||||  
 DB 1 CCTGTATGCGCTGAGCCA 19

RESULT 735  
 ID ADR75939 standard; DNA; 19 BP.  
 XX  
 AC ADR75939;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 424.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 424; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1526 TGCTAATTACTGATGGAA 1544  
 |||||  
 DB 1 TGCTAATTACTGATGGAA 19

RESULT 736  
 ADR75956  
 ID ADR75956 standard; DNA; 19 BP.  
 XX  
 AC ADR75956;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 441.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 424; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 441; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1939 AAGATTGGATATCCAGA 1957  
 |||||  
 Db 1 AAGATTGGATATCCAGA 19  
 |||||  
 RESULT 737  
 ADR75957  
 ID ADR75957 standard; DNA; 19 BP.  
 XX  
 AC ADR75957;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 442.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 442; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

```

XX SQ Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1940 AGAATTGGATATCAAGAT 1958
Db 1 AGAATTGGATATCAAGAT 19
|||||

RESULT 738
ADR75968
ID ADR75968 standard; DNA; 19 BP.
XX AC ADR75968;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 453.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; tRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0458665P.
XX PR 25-APR-2003; 2003US-045802P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 453; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity, a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX SQ Sequence 19 BP; 9 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2078 AGCCTCAGCCAAAATGAA 2096
Db 1 AGCCTCAGCCAAAATGAA 19
|||||

RESULT 739
ADR75992
ID ADR75992 standard; DNA; 19 BP.
XX AC ADR75992;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 477.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; tRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.

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PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 477; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2635 TTGAATCCCTCCACTGGAGC 2653  
 Db 1 TTGAATCCCTCCACTGGAGC 19  
 RESULT 740  
 ADR76003  
 ID ADR76003 standard; DNA; 19 BP.  
 XX  
 AC ADR76003;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 488.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 488; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 7 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

```

Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2829 ATGAACACCACTTCTTCC 2847
    |||||
Db 1 ATGAACACCACTTCTTCC 19

RESULT 741
ADR76005
ID ADR76005 standard; DNA; 19 BP.
XX
AC ADR76005;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 490.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454285P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 15-APR-2003; 2003US-0463772P.
PR 17-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 490; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where

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the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 2 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2850 GAGTCGGGCTCGAGGCTC 2868  
|||||  
Db 1 GAGTCGGGCTCGAGGCTC 19

RESULT 742  
ADR76023  
ID ADR76023 standard; DNA; 19 BP.  
XX  
AC ADR76023;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 508.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454285P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 15-APR-2003; 2003US-0463772P.  
PR 17-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 490; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 508; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3564 CTGCTTCTCCAAATGGACT 3582
Db 1 CTGCTTCTCCAAATGGACT 19

RESULT 743
ADR76035
ID ADR76035 standard; DNA; 19 BP.
XX
XX ADR76035;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 520.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX Homo sapiens.
OS WO2004080406-A2.
XX
XX 23-SEP-2004.
PD
XX
XX 08-MAR-2004; 2004WO-US007070.
PF
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 520; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 10 A; 3 C; 1 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3687 AAAAATGACTTCCAATT 3705

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Db      1 AAAAAAAAAAGACTTCCCAATT 19
        |||||
RESULT 744
ADR76040
ID      ADR76040 standard; DNA; 19 BP.
XX
AC      ADR76040;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 525.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      09-MAY-2003; 2003US-0465802P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
WPI: 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 525; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 3925 TGGGATTGCCAGACTTCCA 3943  
|||||  
DB 1 TGGGATTGCCAGACTTCCA 19

RESULT 745  
ADR76044  
ID ADR76044 standard; DNA; 19 BP.  
XX  
AC ADR76044;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 529.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 09-MAY-2003; 2003US-0465802P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
WPI: 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 525; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

```

PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 529; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g. Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4046 CTCACAGATCTAAAGATG 4064
Db |||||
1 CTCACAGATCTAAAGATG 19

RESULT 746
ADR76046
ID ADR76046 standard; DNA; 19 BP.
AC
XX ADR76046;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 531.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX
OS WO2004080406-A2.
PN

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XX PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 531; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g. Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4102 CTGTGGGATTCATCTGCC 4120
Db |||||
1 CTGTGGGATTCATCTGCC 19

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RESULT 747
ID ADR76250 standard; DNA; 19 BP.
XX
AC ADR76250;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 735.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 735; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

```

disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 8 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 GCTGAGGAGCCGCCGAGC 66  
|||||  
Db 1 GCTGAGGAGCCGCCGAGC 19

RESULT 748  
ADR76257  
ID ADR76257 standard; DNA; 19 BP.  
XX  
AC ADR76257;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 742.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 735; 378bp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 742; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 875 GGACGCTAAGAGGAGCAT 893

DB 1 GGACGCTAAGAGGAGCAT 19

RESULT 749

ADR76313

ID ADR76313 standard; DNA; 19 BP.

XX

AC ADR76313;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 798.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454982P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPT; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 798; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 353 GATCACTGCAAGTTGAG 371

DB 1 GATCACTGCAAGTTGAG 19

RESULT 750

ADR76336

ID ADR76336 standard; DNA; 19 BP.

XX

AC ADR76336;  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 821.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0456655P.  
XX 25-APR-2003; 2003US-045802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 821; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX Qy 592 ACATCAAGAGGGGCATCAT 610  
XX Db 1 ACATCAAGAGGGGCATCAT 19  
XX  
XX RESULT 751  
XX ADR76337  
XX ID ADR76337 standard; DNA; 19 BP.  
XX  
XX AC ADR76337;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 822.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0456655P.  
XX 25-APR-2003; 2003US-045802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 821; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 822; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 1 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 607 TCATTTCTGCCCTCTCTGGT 625
DB 1 TCATTTCTGCCCTCTCTGGT 19

RESULT 752
ID ADR76346
XX ADR76346;
XX ADR76346;
XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 831.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
Manoharan M, Bumcrot D;
WPI; 2004-677362/66.
Interference RNA agent useful for treating dyslipidemias, coronary artery
disease, diabetes, cancer or neurological disease, comprises sense
sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 831; 378pp; English.
The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
Sequence 19 BP; 6 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 708 ACGAGGAAGGCGCAATGTGG 726
DB 1 ACGAGGAAGGCGCAATGTGG 19

RESULT 753
ID ADR76358
XX ADR76358 standard; DNA; 19 BP.
XX
XX ADR76358;
XX
XX 16-DEC-2004 (first entry)
XX

```

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 843.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 08-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification increases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 CAACACCTCTTCTGCTT 936

Db 1 CAACACCTCTTCTGCTT 19

RESULT 754

ADR76370

ID ADR76370 standard; DNA; 19 BP.

XX ADR76370;

AC 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 855.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification increases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 1060 AGAGCACCACCAATCCACATC 1078  
|||||  
Db 1 AGAGCACCACCAATCCACATC 19

RESULT 755

ADR76372

ID ADR76372 standard; DNA; 19 BP.

AC ADR76372;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 857.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 857; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 1123 TGAATAAACTAACCATCTC 1141  
|||||  
Db 1 TGAATAAACTAACCATCTC 19

RESULT 756

ADR76373

ID ADR76373 standard; DNA; 19 BP.

AC ADR76373;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 858.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 858; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1124 GAAAAAATAACCATCTCT 1142

Db 1 GAAAAAATAACCATCTCT 19

RESULT 757

ADR76375

ID ADR76375 standard; DNA; 19 BP.

XX AC ADR76375;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 860.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 860; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1166 TCTTCTCAATAAGCTGGTT 1184

DB 1 TCTTCTCAATAAGCTGGTT 19

RESULT 758

ID ADR76396 standard; DNA; 19 BP.

XX ADR76396;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 881.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493988P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 881; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1625 GGAGCAGTTAACTCCAGAA 1643

DB 1 GGAGCAGTTAACTCCAGAA 19

RESULT 759

ID ADR76412

XX ADR76412 standard; DNA; 19 BP.

XX ADR76412;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 897.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 897; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1841 GGCAGATATTAAACAAATT 1859  
 |||||  
 Db 1 GGCAGATATTAAACAAATT 19  
 |||||  
 RESULT 760  
 ADR76424  
 ID ADR76424 standard; DNA; 19 BP.  
 XX  
 AC ADR76424;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 909.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 909; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1951 TCACAGATCTGAAAAGTT 1969  
 DB 1 TCACAGATCTGAAAAGTT 19  
 RESULT 761  
 ADR76428  
 ID ADR76428 standard; DNA; 19 BP.  
 XX  
 AC ADR76428;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 913.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 913; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2007 GTCATGGACTTCAGAAAT 2025  
 DB 1 GTCATGGACTTCAGAAAT 19  
 RESULT 762  
 ADR76435  
 ID ADR76435 standard; DNA; 19 BP.  
 XX  
 AC ADR76435;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 920.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PP 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 09-MAY-2003; 2003US-0465802P.  
 XX PR 05-MAY-2003; 2003US-0469612P.  
 XX PR 11-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 920; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||

Db 1 TGGATTGCTTCAGCTGAC 19  
 RESULT 763  
 ADR76459  
 ID ADR76459 standard; DNA; 19 BP.  
 XX AC ADR76459;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 944.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 944; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||

Qy 2168 TGGATTGCTTCAGCTGAC 2186

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2419 ATTGAAATCCAAAGAGT 2437

DB 1 ATTGAAATCCAAAGAGT 19

RESULT 764

ADR76461

ID ADR76461 standard; DNA; 19 BP.

AC ADR76461;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 946.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0519453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Buncrot D;

XX

XX

WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 946; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2427 TCCAAAGAGTCCCGGAAG 2445

DB 1 TCCAAAGAGTCCCGGAAG 19

RESULT 765

ADR76471

ID ADR76471 standard; DNA; 19 BP.

AC ADR76471;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 956.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 956; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
 Best Match 0.1%; Score 19; DB 1; Length 19;  
 Query Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps. 0;  
 Qy 2592 AAGATGACATTTTTCCTC 2610  
 Db 1 AAGATGACATTTTTCCTC 19  
 RESULT 766

ADR76476  
 ID ADR76476 standard; DNA; 19 BP.  
 XX ADR76476;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 961.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 956; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2631 GCCTTGAACTCCCACTG 2649  
 Db 1 GCCTTGAACTCCCACTG 19  
 RESULT 767  
 ADR76488  
 ID ADR76488 standard; DNA; 19 BP.  
 XX  
 AC ADR76488;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 973.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-04658012P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510248P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XN Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 973; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2889 AAGCTGAAGTTTATCATTC 2907

Db 1 AAGCTGAAGTTTATCATTC 19

RESULT 768

ADR76493

ID ADR76493 standard; DNA; 19 BP.

XX

AC ADR76493;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 978.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX



CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 3053 CTGCACCTCAGGCGTTAC 3071

Db 1 CTGCACCTCAGGCGTTAC 19

RESULT 770

ADNR76509  
 ID ADNR76509 standard; DNA; 19 BP.

XX AC ADNR76509;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 994.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Buncrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 994; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3381 GAGGCAAAACGCTCTTACA 3399

Db 1 GAGGCAAAACGCTCTTACA 19

RESULT 771

ADNR76655

ID ADNR76655 standard; DNA; 19 BP.

XX AC ADNR76655;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1140.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465812P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1140; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3622 TGGCATGGCATTATGATGA 3640
Db 1 TGGCATGGCATTATGATGA 19
RESULT 772
AD76990
ID AD76990 standard; DNA; 19 BP.
XX
XX AC AD76990;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1475.

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antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US0007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0493986P.

08-AUG-2003; 2003US-0494597P.

11-AUG-2003; 2003US-0506341P.

26-SEP-2003; 2003US-0510246P.

09-OCT-2003; 2003US-0510318P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 1140; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3622 TGGCATGGCATTATGATGA 3640

Db 1 TGGCATGGCATTATGATGA 19

RESULT 772

AD76990

ID AD76990 standard; DNA; 19 BP.

XX

XX AC AD76990;

XX

XX DT 16-DEC-2004 (first entry)

XX

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1475.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3625 CATGGCATTATGATGAAGA 3643

Db 1 CATGGCATTATGATGAAGA 19

RESULT 773

ADR77263

ID ADR77263 standard; DNA; 19 BP.

XX ADR77263;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1748.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510248P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 1748; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3045 CTGAATTACTGCACCTCAG 3063

Db 1 CTGAATTACTGCACCTCAG 19

RESULT 774

ADR77532

ID ADR77532 standard; DNA; 19 BP.

XX ADR77532;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2017.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2017; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4112 CCATCTGCCATCTCGAG 4130  
 Db 1 CCATCTGCCATCTCGAG 19  
 RESULT 775  
 ADR77540  
 ID ADR77540 standard; DNA; 19 BP.  
 XX  
 AC ADR77540;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2025.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2025; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4290 CGTTACCAACATGAGGCTG 4308
DB 1 CGTTACCAACATGAGGCTG 19

RESULT 776
ADNR77556
ID ADR77556 standard; DNA; 19 BP.
XX
AC ADR77556;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2041.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0491986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2041; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g.; AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
SQ Sequence 19 BP; 5 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4553 GAAACAGCATTTGTTGTC 4571
DB 1 GAAACAGCATTTGTTGTC 19

RESULT 777
ADNR77558
ID ADR77558 standard; DNA; 19 BP.
XX
AC ADR77558;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2043.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0491986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
XX

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2043; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4579 TCAGATTGATGGGCGAGTT 4597
Db 1 TCAGATTGATGGGCGAGTT 19
XX
RESULT 778
ADNR77564
ID ADNR77564 standard; DNA; 19 BP.
XX
XX AC ADNR77564;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2049.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2049; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

QY      4678 AGTCCAACTGAGGTTTAA 4696
DB      1 AGTCCAACTGAGGTTTAA 19

RESULT 779
ADRT7570
ID      ADR77570 standard; DNA; 19 BP.
XX
AC      ADR77570;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 2055.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 2055; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device

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that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4814 GTATGAGAACTACGAGCTG 4832  
|||||  
DB 1 GTATGAGAACTACGAGCTG 19

RESULT 780  
ADRT78050  
ID ADR78050 standard; DNA; 19 BP.  
XX  
AC ADR78050;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2535.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 2055; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device

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PA (ALNY-) ALNYLAM PHARM.
PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2535; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3946 TCCAGAAACCTCTCTT 3964
DB 1 TCCAGAAACCTCTCTT 19
RESULT 781
AD78144
ID AD78144 standard; DNA; 19 BP.
XX
AC AD78144;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2629.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.

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XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2629; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3638 TGAAGAGACGATTGAATTT 3656
DB 1 TGAAGAGACGATTGAATTT 19

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RESULT 782  
 ADR78151  
 ID ADR78151 standard; DNA; 19 BP.  
 AC ADR78151;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2636.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2636; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;

Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4561 ATTTGTTTGTCAAGAAGT 4579

Db 1 ATTTGTTTGTCAAGAAGT 19

RESULT 783

ADR78236

ID ADR78236 standard; DNA; 19 BP.

AC ADR78236;

XX

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2721.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.

XX WO2004080406-A2.  
 XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2721; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2419 ATTTGAATCCAAAGAAGT 2437
Db 1 ATTTGAATCCAAAGAAGT 19
RESULT 784
ADR78288
XX ADR78288 standard; DNA; 19 BP.
XX
XX ADR78288;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide segid 2773.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2773; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1417 TCACATGCGCAGGATCA 1435
Db 1 TCACATGCGCAGGATCA 19
RESULT 785
ADR78309

```

ID ADR78309 standard; DNA; 19 BP.  
 AC ADR78309;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2794.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2794; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 2 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No.6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2351 CAAAGATGATTAACATGAG 2369  
 Db 1 CAAAGATGATTAACATGAG 19  
 RESULT 786  
 ADR78315  
 ID ADR78315 standard; DNA; 19 BP.  
 XX  
 AC ADR78315;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2800.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2800; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2593 AGAATGACTTTTCTTCA 2611  
 Db 1 AGAATGACTTTTCTTCA 19  
 RESULT 787  
 ADR78327  
 ID ADR78327 standard; DNA; 19 BP.  
 XX  
 AC ADR78327;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2812.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469812P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT  
 PT Example 5; SEQ ID NO 2812; 378pp; English.  
 XX  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3484 AAATCAAGGCTGTATTTC 3502  
 Db 1 AAATCAAGGCTGTATTTC 19  
 RESULT 788  
 ADR78349  
 ID ADR78349 standard; DNA; 19 BP.  
 XX  
 AC ADR78349;  
 XX

DT 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2834.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2834; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control Apob gene expression.  
XX  
SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e-02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4570 TCAAAGAAGTCAAGATTGA 4588  
Db 1 TCAAAGAAGTCAAGATTGA 19  
RESULT 789  
ADR78352  
ID ADR78352 standard; DNA; 19 BP.  
XX  
XX ADR78352;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2837.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2837; 378pp; English.  
XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4856 GAAGTATAAGAACTTGGC 4874  
 DB 1 GAAGTATAAGAACTTGGC 19  
 |||||

RESULT 790  
 ADR78476  
 ID ADR78476 standard; DNA; 19 BP.  
 XX AC ADR78476;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2961.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 2961; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1959 CTGAAAAGTTAGTGAAG 1977  
 DB 1 CTGAAAAGTTAGTGAAG 19  
 |||||

RESULT 791  
 ADR78481  
 ID ADR78481 standard; DNA; 19 BP.  
 XX AC ADR78481;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2966.  
 XX



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
XX  
PN WO2004080406-A2.  
XX  
XX PD 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX PA (ALNY-) ALNYLAM PHARM.  
XX  
XX PI Manoharan M, Bumcrot D;  
XX  
XX DR WPI; 2004-677362/66.  
XX  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 2966; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
XX  
XX SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
Query March 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 3654 TTTGAATGGAACACAGGCA 3672  
|||||  
DB 1 TTTGAATGGAACACAGGCA 19  
RESULT 792  
ADR78482  
ID ADR78482 standard; DNA; 19 BP.  
XX  
XX AC ADR78482;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2967.  
XX  
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO2004080406-A2.  
XX  
XX PD 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX PA (ALNY-) ALNYLAM PHARM.  
XX  
XX PI Manoharan M, Bumcrot D;  
XX  
XX DR WPI; 2004-677362/66.  
XX  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 2967; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (II), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4417 TTCTAGATTGCAATATCAA 4435  
 Db 1 TTCTAGATTGCAATATCAA 19

RESULT 793  
 ADR78511  
 ID ADR78511 standard; DNA; 19 BP.  
 XX  
 AC ADR78511;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2996.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2996; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (II), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 510 AGGTATGAGCTCAAGCTGG 528  
 Db 1 AGGTATGAGCTCAAGCTGG 19

RESULT 794  
 ADR78517  
 ID ADR78517 standard; DNA; 19 BP.  
 XX  
 AC ADR78517;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3002.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3002; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 662 TCTGGATACCGTGATGGA 680  
 Db 1 TCTGGATACCGTGATGGA 19  
 RESULT 795  
 ADR78527  
 ID ADR78527 standard; DNA; 19 BP.  
 XX  
 XX AC ADR78527;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3012.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA, antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX FN WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3012; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 804 GCTCTCATCAAGGCATGA 822  
 Db 1 GCTCTCATCAAGGCATGA 19

RESULT 796  
 ADR78530  
 ID ADR78530 standard; DNA; 19 BP.  
 AC ADR78530;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3015.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3015; 378bp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 902 AGCCATCTGCAAGGAGCAA 920  
 Db 1 AGCCATCTGCAAGGAGCAA 19

RESULT 797  
 ADR78544  
 ID ADR78544 standard; DNA; 19 BP.  
 AC ADR78544;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3029.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; diabetes; cancer; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3029; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1172 CAATAAGCTGTTACTGAG 1190  
 |||||  
 Db 1 CAATAAGCTGTTACTGAG 19  
 RESULT 798  
 ADR78555  
 ID ADR78555 standard; DNA; 19 BP.  
 XX AC ADR78555;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3040.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3040; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1450 CCTGTATGCGCTGAGCA 1468  
 DB |||||  
 1 CCTGTATGCGCTGAGCA 19  
 RESULT 799  
 ID ADR78572  
 AD ADR78572 standard; DNA; 19 BP.  
 XX  
 AC ADR78572;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3057.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3057; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1923 AATATCTTGAACTCAGAAG 1941  
 DB |||||  
 1 AATATCTTGAACTCAGAAG 19  
 RESULT 800  
 ADR78582  
 ID ADR78582 standard; DNA; 19 BP.  
 XX  
 AC ADR78582;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3067.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX



CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2263 CAGACAGTGTCAACAAAGC 2281  
 DB 1 CAGACAGTGTCAACAAAGC 19  
 |||||

RESULT 802  
 ID ADR78608 standard; DNA; 19 BP.  
 AC ADR78608;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3093.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; tRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465685P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3093; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2620 TCATGGAGATGCTTTGA 2638  
 DB 1 TCATGGAGATGCTTTGA 19  
 |||||

RESULT 803  
 ADR78620  
 ID ADR78620 standard; DNA; 19 BP.  
 XX  
 AC ADR78620;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3105.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; tRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0452894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3105; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease, diabetes, cancer or neurological disease, comprises sense
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred.No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2776 TTGTGACAAATATGGGCAT 2794
Db 1 TTGTGACAAATATGGGCAT 19
RESULT 804
ADR78660
ID ADR78660 standard; DNA; 19 BP.

```

```

XX
AC ADR78660;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3145.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3145; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4010 GAAATTCGAGATTCCTTTG 4028  
 Db 1 GAAATTCGAGATTCCTTTG 19

RESULT 805  
 ADR78683  
 ID ADR78683 standard; DNA; 19 BP.  
 XX  
 AC ADR78683;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3168.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3168; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4828 AGCTGACTTTAAATCTGA 4846  
 Db 1 AGCTGACTTTAAATCTGA 19

RESULT 806  
 ADR78869  
 ID ADR78869 standard; DNA; 19 BP.  
 XX  
 AC ADR78869;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3354.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3354; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 237 CTGGTCTCTCCAAAGATG 255
Db 1 CTGGTCTCTCCAAAGATG 19
|||||
|||||

RESULT 807
ADR78885
ID ADR78885 standard; DNA; 19 BP.
XX
AC ADR78885;
XX
DT 16-DEC-2004 (first entry)

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XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3370.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3370; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1820 GTTGATGAGGAGTCCTTCA 1838  
 |||||  
 Db 1 GTTGATGAGGAGTCCTTCA 19

RESULT 808  
 ADR78895  
 ID ADR78895 standard; DNA; 19 BP.  
 XX  
 AC ADR78895;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3380.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3380; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2775 TTGTGACAAATATGGCA 2793  
 |||||  
 Db 1 TTGTGACAAATATGGCA 19

RESULT 809  
 ADR78926  
 ID ADR78926 standard; DNA; 19 BP.  
 XX  
 AC ADR78926;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3411.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3380; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3411; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 247 CAAAGATGCGACCGGATT 265  
 Db 1 CAAAGATGCGACCGGATT 19  
 |||||  
 RESULT 810  
 ADR78943  
 ID ADR78943 standard; DNA; 19 BP.  
 XX  
 AC ADR78943;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3428.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PP 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3428; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 493 TTGCTGCAGCATCTCCAG 511
Db 1 TTGCTGCAGCATCTCCAG 19

RESULT 811
AD78955
ID ADR78955 standard; DNA; 19 BP.
AC ADR78955;
XX
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3440.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 3440; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

```

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 1 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 607 TCATTTCCTGCCCTCCGGT 625  
Db 1 TCATTTCCTGCCCTCCGGT 19

RESULT 812  
AD78965  
ID ADR78965 standard; DNA; 19 BP.  
XX  
XX AC ADR78965;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3450.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX PD 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 3440; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3450; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 709 CGAGGAGGGCAATGTGGC 727  
 DB 1 CGAGGAGGGCAATGTGGC 19  
 RESULT 813  
 ADR78980  
 ID ADR78980 standard; DNA; 19 BP.  
 XX  
 AC ADR78980;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3465.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3465; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 964 TAGCACAAGTCACACAGAC 982  
 |||||  
 Db 1 TAGCACAAGTCACACAGAC 19

RESULT 814  
 ADR78993  
 ID ADR78993 standard; DNA; 19 BP.  
 XX  
 AC ADR78993;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3478.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3478; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1166 TCTCTCAATAAGCTGGTT 1184

|||||

Db 1 TCTCTCAATAAGCTGGTT 19

RESULT 815

ADR79026

ID ADR79026 standard; DNA; 19 BP.

XX

AC ADR79026;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3511.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.



```

PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3511; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1762 TTCAGACTTTCCTTGATGA 1780
Db 1 TTCAGACTTTCCTTGATGA 19

RESULT 816
ADR79050
ID ADR79050 standard; DNA; 19 BP.
XX
XX ADR79050;
AC
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3535.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454982P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0493986P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3535; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2093 AGAAGGGAATCTATATTT 2111
XX
XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      |||||||
1 AGAAGGGAATCTTATATT 19

RESULT 817
ADR79068
ID   ADR79068 standard; DNA; 19 BP.
XX
AC   ADR79068;
XX
DT   16-DEC-2004 (first entry)
XX
DE   Human apolipoprotein B (ApoB) oligonucleotide seqid 3553.
XX
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004080406-A2.
XX
PD   23-SEP-2004.
XX
PF   08-MAR-2004; 2004WO-US007070.
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
PI   Manoharan M, Bumcrot D;
XX
DR   WPI; 2004-677362/66.
XX
PT   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
PS   Example 5; SEQ ID NO 3553; 378pp; English.
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
CC   and the antisense sequence targets a human gene sequence. Also described
CC   are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC   levels or glucose-6-phosphatase levels in a subject; producing (I);
CC   stabilising (I), involves selecting a sequence with activity and
CC   introducing one or more asymmetrical modification in the sequence, where
CC   the modification decreases nuclease sensitivity while not decreasing its
CC   activity; a kit comprising (I) and instructions for its use; and a device
CC   that can dispense or administer a composition comprising (I). (I) is
CC   useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2376 ATGCTAAATGGAATAATGC 2394  
|||||  
Db 1 ATGCTAAATGGAATAATGC 19

RESULT 818  
ADR79070  
ID ADR79070 standard; DNA; 19 BP.  
XX  
AC ADR79070;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3555.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3553; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3555; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2380 TAAATGGGAATAATGCTCAG 2398
Db 1 TAAATGGGAATAATGCTCAG 19
RESULT 8.19
ADR79092
ID ADR79092 standard; DNA; 19 BP.
XX
AC ADR79092;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3577.
XX
KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
OS
XX WO2004080406-A2.
PN
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XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3577; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2618 CTTTCATGGAGATGCTTT 2636
Db 1 CTTTCATGGAGATGCTTT 19
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RESULT 820  
 ID ADR79118 standard; DNA; 19 BP.  
 AC ADR79118;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3603.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3603; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3185 CTATGAGCTCCAGAGAG 3203  
 Db 1 CTATGAGCTCCAGAGAG 19  
 RESULT 821  
 ADR79119  
 ID ADR79119 standard; DNA; 19 BP.  
 XX  
 AC ADR79119;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3604.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3603; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 3604; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3212 CTTGGTGGATACCTCGAAG 3230  
Db 1 CTTGGTGGATACCTCGAAG 19

RESULT 822  
ADR79167  
ID ADR79167 standard; DNA; 19 BP.  
XX AC  
XX ADR79167;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3652.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.

XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-045802P.  
PR 09-MAY-2003; 2003US-0459612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3652; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
sense sequence and an antisense sequence, where the sense sequences have  
one or more asymmetrical 2'-O alkyl modifications, the antisense  
sequences have one or more asymmetrical phosphorothioate modifications  
and the antisense sequence targets a human gene sequence. Also described  
are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
levels or glucose-6-phosphatase levels in a subject; producing (I);  
stabilising (I), involves selecting a sequence with activity and  
introducing one or more asymmetrical modification in the sequence, where  
the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4112 CCATCTGCCATCTCGAGAG 4130  
Db 1 CCATCTGCCATCTCGAGAG 19

RESULT 823  
ADR79207  
ID ADR79207 standard; DNA; 19 BP.  
XX

AC ADR79207;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3692.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0494597P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3692; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4917 CTGCTGCTTCTGAATATC 4935  
 Db 1 CTGCTGCTTCTGAATATC 19  
 RESULT 824  
 ADR79487  
 ID ADR79487 standard; DNA; 19 BP.  
 XX  
 AC ADR79487;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3979.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0494597P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3692; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 3979; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3525 GCCAGAAGTGAGATCCTCG 3543
DB 1 GCCAGAAGTGAGATCCTCG 19
RESULT 825
ADR79526
XX ADR79526 standard; DNA; 19 BP.
XX
XX ADR79526;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4018.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465655P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4018; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4389 TCATGTGATGGTCTCTAC 4407
DB 1 TCATGTGATGGTCTCTAC 19
RESULT 826
ADR79834
XX ADR79834 standard; DNA; 19 BP.
XX
XX ADR79834;
XX
XX 16-DEC-2004 (first entry)
XX

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Human apolipoprotein B (ApoB) oligonucleotide seqid 4328.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 4328; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2693 TCCGGAGCCCAAGGCTGGA 2711  
|||||

Db 1 TCCGGAGCCCAAGGCTGGA 19

RESULT 827

ADR79878

ID ADR79878 standard; DNA; 19 BP.

XX

AC ADR79878;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4374.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

PD WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 4374; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2178 TCAGCTGACCTCATCGAGA 2196  
Db 1 TCAGCTGACCTCATCGAGA 19

RESULT 828

ADR80264  
ID ADR80264 standard; DNA; 19 BP.  
XX  
AC ADR80264;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4761.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
PF 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 4761; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 2 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2706 GCTGGAGTAAACCTGGGAG 2724  
Db 1 GCTGGAGTAAACCTGGGAG 19

RESULT 829

ADR80273  
ID ADR80273 standard; DNA; 19 BP.  
XX  
AC ADR80273;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4770.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4770; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3013 CCTGGTCAGTTTCAAGCA 3031  
 Db 1 CCTGGTCAGTTTCAAGCA 19  
 RESULT 830  
 ADR80305  
 ID ADR80305 standard; DNA; 19 BP.  
 XX  
 AC ADR80305;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4802.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4802; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4302 AAGGCTGACTCTGTGGTTG 4320  
 Db 1 AAGGCTGACTCTGTGGTTG 19  
 RESULT 831  
 ADR80335  
 ID ADR80335 standard; DNA; 19 BP.  
 XX  
 AC ADR80335;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4832.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 FI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4832; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3946 TCCCAGAAACCTCTCTCTT 3964  
 Db 1 TCCCAGAAACCTCTCTCTT 19  
 RESULT 832  
 ADR80381  
 ID ADR80381 standard; DNA; 19 BP.  
 XX  
 AC ADR80381;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4878.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4878; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 13 A; 1 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3471 AAGGAAGAAGAAATCA 3489  
 DB 1 AAGGAAGAAGAAATCA 19  
 RESULT 833  
 ADR80408  
 ID ADR80408 standard; DNA; 19 BP.  
 XX  
 AC ADR80408;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4905.  
 XX  
 KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4905; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3697 CTTCCAAATTCCTGTGGA 3715  
 DB 1 CTTCCAAATTCCTGTGGA 19  
 RESULT 834  
 ID ADR80425  
 AC ADR80425 standard; DNA; 19 BP.  
 XX  
 AC ADR80425;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4922.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4922; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3069 TACTCCAAACCCAGCTCCA 3087  
 DB 1 TACTCCAAACCCAGCTCCA 19  
 RESULT 835  
 ID ADR75540  
 AC ADR75540 standard; DNA; 19 BP.  
 XX  
 AC ADR75540;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 25.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 25; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 1 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

Db 1 CGAGGCCGGCTGCTGGC 19  
 RESULT 836  
 ADR75544  
 ID ADR75544 standard; DNA; 19 BP.  
 XX ADR75544;  
 AC ADR75544;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 29.  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 29.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 29; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 1 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 7 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 576 CCTACTTACATCTCTGAACA 594  
 |||||  
 DB 1 CCTACTTACATCTCTGAACA 19

RESULT 837

ADR75548

ID ADR75548 standard; DNA; 19 BP.

XX AC ADR75548;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 33.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 08-AUG-2003; 2003US-0469612P.

XX PR 11-AUG-2003; 2003US-0493986P.

XX PR 26-SEP-2003; 2003US-0494597P.

XX PR 09-OCT-2003; 2003US-0506341P.

XX PR 10-OCT-2003; 2003US-0510246P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 33; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 840 CTGATCAGCAGCAGCCAGT 858

|||||

DB 1 CTGATCAGCAGCAGCCAGT 19

RESULT 838

ADR75557

ID ADR75557 standard; DNA; 19 BP.

XX AC ADR75557;

XX

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 42.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

PD 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 42; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, CC

ADR75625  
ID ADR75625 standard; DNA; 19 BP.  
XX  
AC ADR75625;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 110.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 42; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, CC

PT disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
PT  
XX Example 5; SEQ ID NO 110; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, CC

Best Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1321 TGAACGTGTGTCATGCCAA 1339  
Db 1 TGAACGTGTGTCATGCCAA 19  
RESULT 839



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4615 ATGCTAAGGCACATATGG 4633  
 Db 1 ATGCTAAGGCACATATGG 19  
 RESULT 840  
 ADR75636  
 ID ADR75636 standard; DNA; 19 BP.  
 AC ADR75636;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 121.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465662P.  
 XX 09-MAY-2003; 2003US-0465802P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 121; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 0 A; 7 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 164 GGCGCTGCGCTGCTGCTG 182

Db 1 GGCGCTGCGCTGCTGCTG 19

RESULT 841

ADR75647

ID ADR75647 standard; DNA; 19 BP.

XX

AC ADR75647;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 132.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 132; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 360 TGCAGGTTGAGCTGGAGG 378  
 Db 1 TGCAGGTTGAGCTGGAGG 19  
 |||||  
 RESULT 842  
 ADNR75652  
 ID ADNR75652 standard; DNA; 19 BP.  
 XX  
 AC ADNR75652;

XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 137.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 137; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 360 TGCAGGTTGAGCTGGAGG 378  
 Db 1 TGCAGGTTGAGCTGGAGG 19  
 |||||  
 RESULT 842  
 ADNR75652  
 ID ADNR75652 standard; DNA; 19 BP.  
 XX  
 AC ADNR75652;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 397 TCATCTGGAAGACCGCCA 415  
 |||||  
 Db 1 TCATCTGGAAGACCGCCA 19

## RESULT 843

ADR75662  
 ID ADR75662 standard; DNA; 19 BP.

AC ADR75662;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 147.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493988P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT Example 5; SEQ ID NO 147; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (W1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (W1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 911 CAAGGAGCAACACCTCTTC 929

|||||  
 Db 1 CAAGGAGCAACACCTCTTC 19

## RESULT 844

ADR75673

ID ADR75673 standard; DNA; 19 BP.

XX ADR75673;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 158.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 158; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.13; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1519 TGGACATTGCTAATTACCT 1537  
 DB 1 TGGACATTGCTAATTACCT 19  
 RESULT 845  
 ADNR75721  
 ID ADNR75721 standard; DNA; 19 BP.  
 XX  
 AC ADNR75721;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 206.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-Hiv;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS  
 XX Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 206; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 0 A; 4 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4021 TTCCCTTGCTTTTGTTGG 4039

Db 1 TTCCCTTGCTTTTGTTGG 19

RESULT 846

ADR75863

ID ADR75863 standard; DNA; 19 BP.

XX ADR75863;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 348.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510248P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 348; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3654 TTTCGAATGGACACAGGCA 3672

Db 1 TTTCGAATGGACACAGGCA 19

RESULT 847

ADR75880

ID ADR75880 standard; DNA; 19 BP.

XX ADR75880;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 365.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 365; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 1 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 23 CTGAGTCCCTTCGCGTT 41  
 Db 1 CTGAGTCCCTTCGCGTT 19  
 RESULT 848  
 AD75920  
 ID AD75920 standard; DNA; 19 BP.  
 XX AC AD75920;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 405.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 405; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

```
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 TGTCTTGAAGACTCTCCAG 1118
Db 1 TGTCTTGAAGACTCTCCAG 19

RESULT 849
AD75928
ID ADR75928 standard; DNA; 19 BP.
XX
AC ADR75928;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 413.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0452894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 413; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
```

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CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1198 GCCTCAGTGATGAGCAGT 1216
Db 1 GCCTCAGTGATGAGCAGT 19

RESULT 850
AD75938
ID ADR75938 standard; DNA; 19 BP.
XX
AC ADR75938;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 423.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
```





Qy 1920 GCCAATATCTGAACTCAG 1938  
 Db 1 GCCAATATCTGAACTCAG 19

RESULT 852  
 ADR75967  
 ID ADR75967 standard; DNA; 19 BP.  
 AC ADR75967;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 452.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Buncrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 452; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2075 CCCAGCCTCAGCCAAATA 2093

Db 1 CCCAGCCTCAGCCAAATA 19

RESULT 853

ADR75979

ID ADR75979 standard; DNA; 19 BP.

XX

AC ADR75979;

XX

DT 16-DEC-2004 (first entry)

XX

DE

Human apolipoprotein B (ApoB) oligonucleotide seqid 464.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

PR



RESULT 855  
 ADR76017  
 ID ADR76017 standard; DNA; 19 BP.  
 AC  
 AC ADR76017;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 502.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 502; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

Seq Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3413 CATTGAGACAGAGAAATT 3431  
 Db 1 CATTGAGACAGAGAAATT 19

RESULT 856  
 ADR76036  
 ID ADR76036 standard; DNA; 19 BP.

AC ADR76036;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 521.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US0007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465655P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0493986P.

PR 08-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 521; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 9 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3688 AAAAATGACTTCAATTT 3706  
|||||  
Db 1 AAAAATGACTTCAATTT 19

RESULT 857  
ADR76039  
ID ADR76039 standard; DNA; 19 BP.

XX AC ADR76039;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 524.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 524; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3909 TTCAACTTCAGAACATGG 3927  
|||||  
Db 1 TTCAACTTCAGAACATGG 19

RESULT 858  
ADR76045

ID ADR76045 standard; DNA; 19 BP.  
 AC ADR76045;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 530.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 530; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4055 TCTAAAGATGTTAGAGACT 4073

Db 1 TCTAAAGATGTTAGAGACT 19

RESULT 859

ADR76047

ID ADR76047 standard; DNA; 19 BP.

XX

AC ADR76047;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 532.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

PA Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 532; 378pp; English.  
PS  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4114 ATCTGCCATCTCGAGAGTT 4132  
Db 1 ATCTGCCATCTCGAGAGTT 19  
RESULT 860  
ADR76064  
ID ADR76064 standard; DNA; 19 BP.  
XX  
AC ADR76064;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 549.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; RNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN W02004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR  
12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454362P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469812P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
DR  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
PS Example 5; SEQ ID NO 549; 378pp; English.  
XX  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4114 ATCTGCCATCTCGAGAGTT 4132  
Db 1 ATCTGCCATCTCGAGAGTT 19  
RESULT 861  
ADR76249  
ID ADR76249 standard; DNA; 19 BP.  
XX  
AC ADR76249;  
XX  
SQ Sequence 19 BP; 2 A; 11 C; 1 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4755 TCCTCACCTCCACCTCTG 4773  
Db 1 TCCTCACCTCCACCTCTG 19  
RESULT 861  
ADR76249  
ID ADR76249 standard; DNA; 19 BP.  
XX  
AC ADR76249;  
XX

DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 734.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 734; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 TCTCGTTGCTGCGCTGA 52  
 |||||  
 Db 1 TCTCGTTGCTGCGCTGA 19

RESULT 862

ADR76320

ID ADR76320 standard; DNA; 19 BP.

XX

AC ADR76320;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 805.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 805; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 437 TGGCTTCAACCTGAGGC 455  
Db 1 TGGCTTCAACCTGAGGC 19

RESULT 863  
AD76383  
ID AD76383 standard; DNA; 19 BP.  
XX  
AC AD76383;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 868.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-049612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumrot D;  
PI WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
PT  
PT Example 5; SEQ ID NO 868; 378pp; English.  
PS  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1277 TCAGTGTGGACAGCCTCAG 1295  
Db 1 TCAGTGTGGACAGCCTCAG 19

RESULT 864  
AD76404  
ID AD76404 standard; DNA; 19 BP.  
XX  
AC AD76404;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 889.  
XX



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
SS  
XX WO2004080406-A2.  
PN  
XX 23-SEP-2004.  
PD  
XX  
PF  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR  
XX 12-MAR-2003; 2003US-0454265P.  
PR  
XX 13-MAR-2003; 2003US-0454962P.  
PR  
XX 13-MAR-2003; 2003US-0455050P.  
PR  
XX 14-APR-2003; 2003US-0462894P.  
PR  
XX 17-APR-2003; 2003US-0463772P.  
PR  
XX 25-APR-2003; 2003US-0465665P.  
PR  
XX 25-APR-2003; 2003US-0465802P.  
PR  
XX 09-MAY-2003; 2003US-0469612P.  
PR  
XX 08-AUG-2003; 2003US-0493986P.  
PR  
XX 11-AUG-2003; 2003US-0494597P.  
PR  
XX 26-SEP-2003; 2003US-0506341P.  
PR  
XX 09-OCT-2003; 2003US-0510246P.  
PR  
XX 10-OCT-2003; 2003US-0510318P.  
PR  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 889; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.18; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1741 ACAAGGACCCAGGAGGTTCT 1759

Db 1 ACAAGGACCCAGGAGGTTCT 19

RESULT 865

ADR76436

ID ADR76436 standard; DNA; 19 BP.

XX ADR76436;

AC ADR76436;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 921.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 921; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2172 TTGCTTCAGTGACCTCA 2190  
 |||||  
 Db 1 TTTGCTTCAGTGACCTCA 19

RESULT 866  
 ADR76438  
 ID ADR76438 standard; DNA; 19 BP.  
 XX  
 AC ADR76438;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 923.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 923; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 1 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2203 TGAAGGAAAAGGCTTTGA 2221  
 |||||  
 Db 1 TGAAGGAAAAGGCTTTGA 19

RESULT 867  
 ADR76465  
 ID ADR76465 standard; DNA; 19 BP.  
 XX  
 AC ADR76465;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 950.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 950; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. (I) is  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2474 GGAGCTTGTTTTCACAGT 2492  
 Db 1 GGAGCTTGTTTTCACAGT 19  
 RESULT 868  
 ADR76498  
 ID ADR76498 standard; DNA; 19 BP.  
 XX  
 AC ADR76498;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 983.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 983; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3111 CTGACCGGGGACACACGAT 3129  
 Db 1 CTGACCGGGGACACACGAT 19

RESULT 869  
 ADR76501  
 ID ADR76501 standard; DNA; 19 BP.  
 XX  
 AC ADR76501;

DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 986.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 986; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3212 CTTGGTGGATACCCCTGAAG 3230  
 Db 1 CTTGGTGGATACCCCTGAAG 19

RESULT 870  
 ADR76508  
 ID ADR76508 standard; DNA; 19 BP.  
 XX  
 AC ADR76508;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 993.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 993; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3315 GAAGTCCAAATTCGGATT 3333  
 |||||  
 Db 1 GAAGTCCAAATTCGGATT 19  
 RESULT 871  
 ADR76510  
 ID ADR76510 standard; DNA; 19 BP.  
 XX AC ADR76510;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (Apob) oligonucleotide seqid 995.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscule; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 995; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3382 AGGCAAAACGCTTACAG 3400  
 Db | | | | | | | | | | | | | | | | | | | |  
 1 AGGCAAAACGCTTACAG 19  
 RESULT 872  
 ADR76543  
 ID ADR76543 standard; DNA; 19 BP.  
 XX  
 AC ADR76543;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1028.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 W02004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0459612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0463772P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1028; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3525 GCCAAGAGTGAGATCCTCG 3543  
 Db | | | | | | | | | | | | | | | | | | | |  
 1 GCCAAGAGTGAGATCCTCG 19  
 RESULT 873  
 ADR76564  
 ID ADR76564 standard; DNA; 19 BP.  
 XX  
 AC ADR76564;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1049.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

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PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PP  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  14-MAR-2003; 2003US-0455050P.
PR  17-APR-2003; 2003US-0462894P.
PR  25-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
XX  (ALNY-) ALNYLAM PHARM.
PA
XX  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 1049; 378pp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
XX  Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2150 AACTACCTCTACTGCTTT 2168
DB 1 AACTACCTCTACTGCTTT 19

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RESULT 874
ADR76643
ID  ADR76643 standard; DNA; 19 BP.
XX
AC  ADR76643;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 1128.
XX
KW  antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
XX  08-MAR-2004; 2004WO-US007070.
XX
XX  07-MAR-2003; 2003US-0452682P.
XX  12-MAR-2003; 2003US-0454265P.
XX  13-MAR-2003; 2003US-0454962P.
XX  14-MAR-2003; 2003US-0455050P.
XX  17-APR-2003; 2003US-0462894P.
XX  25-APR-2003; 2003US-0463772P.
XX  25-APR-2003; 2003US-0465665P.
XX  09-MAY-2003; 2003US-0469612P.
XX  08-AUG-2003; 2003US-0493986P.
XX  11-AUG-2003; 2003US-0494597P.
XX  26-SEP-2003; 2003US-0506341P.
XX  09-OCT-2003; 2003US-0510246P.
XX  10-OCT-2003; 2003US-0510318P.
XX  07-NOV-2003; 2003US-0518453P.
XX
XX  (ALNY-) ALNYLAM PHARM.
PA
XX  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 1128; 378pp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

```

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3933 CCAGACTTCCACATCCAG 3951  
 |||||  
 Db 1 CCAGACTTCCACATCCAG 19

RESULT 875  
 ADR76654  
 ID ADR76654 standard; DNA; 19 BP.  
 AC ADR76654;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1139.  
 DX  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PR  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1139; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 873 CTGGACGCTTAAGAGGAAGC 891  
 |||||  
 Db 1 CTGGACGCTTAAGAGGAAGC 19

RESULT 876  
 ADR77429  
 ID ADR77429 standard; DNA; 19 BP.  
 XX  
 AC ADR77429;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1914.  
 DX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US0007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1914; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1988 AGAATCTCAACTTCCAAC 2006
XX
XX DB 1 AGAATCTCAACTTCCAAC 19
XX
XX RESULT 877
XX ADR77446
XX ID ADR77446 standard; DNA; 19 BP.

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XX AC
XX AD 77446;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1931.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscle; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1931; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1988 AGAATCTCAACTTCCAAC 2006
XX
XX DB 1 AGAATCTCAACTTCCAAC 19
XX
XX RESULT 877
XX ADR77446
XX ID ADR77446 standard; DNA; 19 BP.

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CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 2 A; 6 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3795 TTCCGGCAGCTGGGTCCA 3813  
 Db 1 TTCCGGCAGCTGGGTCCA 19

RESULT 878  
 ADR78145  
 ID ADR78145 standard; DNA; 19 BP.  
 XX AC ADR78145;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2630.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0452894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0491986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2630; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4248 AGTGTGGCAACACCAGCA 4266  
 Db 1 AGTGTGGCAACACCAGCA 19

RESULT 879  
 ADR78163  
 ID ADR78163 standard; DNA; 19 BP.  
 XX AC ADR78163;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2648.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0452894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0491986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2648; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 577 CTACTTACATCTGACAT 595  
 Db 1 CTACTTACATCTGACAT 19  
 RESULT 880  
 ADR78168  
 ID ADR78168 standard; DNA; 19 BP.  
 XX  
 AC ADR78168;  
 XX  
 DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2653.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2653; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 883 AGAGGAGCATGTGGCAGA 901  
DB 1 AGAGGAGCATGTGGCAGA 19  
|||||  
  
RESULT 881  
ID ADR78198 standard; DNA; 19 BP.  
XX  
AC ADR78198;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2683.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2683; 378pp; English.  
PS  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 4527 GCTTCAGTTCATTGGACT 4545  
DB 1 GCTTCAGTTCATTGGACT 19  
|||||  
  
RESULT 882  
ADR78199  
ID ADR78199 standard; DNA; 19 BP.  
XX  
AC ADR78199;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2684.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2683; 378pp; English.  
PS  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2684; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 2 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4562 TTTGTTTGTCAAAGAGTC 4580
XX
XX Db 1 TTTGTTTGTCAAAGAGTC 19
XX
XX RESULT 883
XX ADR78256
XX ID ADR78256 standard; DNA; 19 BP.
XX
XX AC ADR78256;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2741.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

```

cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2741; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

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XX SQ Sequence 19 BP; 1 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 188 GCTGCTGGCGGCGCCAGG 206
Db 1 GCTGCTGGCGGCGCCAGG 19

RESULT 884
ID ADR78278 standard; DNA; 19 BP.
XX AC ADR78278;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2763.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454365P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX DR WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 2763; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

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are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 871 CACTGACGCTAAGAGAA 889  
Db 1 CACTGACGCTAAGAGAA 19

RESULT 885  
ADR78291  
ID ADR78291 standard; DNA; 19 BP.  
XX AC ADR78291;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2776.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454365P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX PA (ALNY-) ALNYLAM PHARM.  
XX PI Manoharan M, Bumcrot D;  
XX DR WPI; 2004-677362/66.  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 2763; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2776; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QV 1519 TGGACATTGCTAATTACCT 1537
Db 1 TGGACATTGCTAATTACCT 19
XX
XX RESULT 886
XX ADR78292
XX ID ADR78292 standard; DNA; 19 BP.
XX
XX AC ADR78292;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2777.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticongulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2777; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX

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Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1520 GGACATTGCTAAATACCTG 1538  
 Db 1 GGACATTGCTAAATACCTG 19

RESULT 887  
 ADR78322  
 ID ADR78322 standard; DNA; 19 BP.  
 XX  
 AC ADR78322;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2807.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2807; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 19; Conservative 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3160 TTGAGCAGTATTCGTCTGAC 3178  
 Db 1 TTGAGCAGTATTCGTCTGAC 19

RESULT 888  
 ADR78353  
 ID ADR78353 standard; DNA; 19 BP.  
 XX  
 AC ADR78353;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2838.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2807; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



```

PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2838; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4857 AAGTATAAGAACTTTGCCA 4875
XX |||||
XX 1 AAGTATAAGAACTTTGCCA 19
XX
XX RESULT 889
XX ADR78470
XX ID ADR78470 standard; DNA; 19 BP.
XX
XX AC ADR78470;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2955.
XX
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0456655P.
XX PR 29-APR-2003; 2003US-0465802P.
XX PR 05-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX PA Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2955; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 565 AGAAGATGACCTACTTA 583

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Db      ||||||| 1 AGAAGATGAACCTACTTA 19
RESULT 890
ADNR78514
ID      ADR78514 standard; DNA; 19 BP.
XX
AC      ADR78514;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 2999.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      11-AUG-2003; 2003US-0493986P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
XX      disease, diabetes, cancer or neurological disease, comprises sense
XX      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 2999; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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CC      is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC      The subject is suffering from a disorder characterised by elevated or
CC      otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC      levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC      disorder is chosen from the HDL/LDL cholesterol imbalance,
CC      dyslipidaemias, hypercholesterolaemia, statin-resistant
CC      hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC      disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC      inhibit hepatic glucose production or for treating glucose-metabolism-
CC      related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC      treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC      lung cancer), neurological disease (e.g., Huntington disease or
CC      spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC      represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC      can be used to control ApoB gene expression.
XX
SQ      Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      619 TCCTGGTTCCCCCAGAGAC 637
DB      1 TCCTGGTTCCCCCAGAGAC 19
RESULT 891
ADNR78537
ID      ADR78537 standard; DNA; 19 BP.
XX
AC      ADR78537;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3022.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      11-AUG-2003; 2003US-0493986P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
XX      disease, diabetes, cancer or neurological disease, comprises sense
XX      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 2999; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3022; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1041 AAGATGGGCGCTGCATTG 1059
Db |||||
1 AAGATGGGCGCTGCATTG 19

RESULT 892
ADR78587
ID ADR78587 standard; DNA; 19 BP.
XX
XX ADR78587;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3072.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.

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XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 09-MAY-2003; 2003US-0465802P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 10-OCT-2003; 2003US-0510246P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3072; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 7 A; 3 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2101 ATCTTATATTGATCCAAA 2119
Db |||||
1 ATCTTATATTGATCCAAA 19

```

RESULT 893  
 ID ADR78607 standard; DNA; 19 BP.  
 AC ADR78607;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3092.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3092; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 2619 TTCTGAGAGATGCTTTG 2637  
 Db 1 TTCTGAGAGATGCTTTG 19  
 XX  
 RESULT 894  
 ADR78615  
 ID ADR78615 standard; DNA; 19 BP.  
 XX  
 AC ADR78615;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3100.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3092; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3100; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2663 GTTGCAAAATATCTTCATCT 2681

DB 1 GTTGCAAAATATCTTCATCT 19

RESULT 895

ADR78631

ID ADR78631 standard; DNA; 19 BP.

XX

AC ADR78631;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3116.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-046565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3116; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 2 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3325 TTCGGATTTTGATGTGA 3343  
 DB 1 TTCGGATTTTGATGTGA 19  
 RESULT 896  
 ADR78681  
 ID ADR78681 standard; DNA; 19 BP.  
 XX

AC ADR78681;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3166.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3166; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 1 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4723 AGATAACAGGAGATATGA 4741  
 Db 1 AGATAACAGGAGATATGA 19  
 RESULT 897  
 ADR78871  
 ID ADR78871 standard; DNA; 19 BP.  
 AC ADR78871;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3356.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3166; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 3356; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 414 CAGTGCACCCCTGAAAGAGG 432
DB 1 CAGTGCACCCCTGAAAGAGG 19
RESULT 898
ADR78890
ID ADR78890 standard; DNA; 19 BP.
XX
AC ADR78890;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3375.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3375; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2384 TGGAAATAATGCTCAGTGTT 2402
DB 1 TGGAAATAATGCTCAGTGTT 19
RESULT 899
ADR78932
ID ADR78932 standard; DNA; 19 BP.
XX
AC ADR78932;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3417.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3417; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0;  
 QY 358 ACTGCAAGGTTGAGCTGGA 376  
 Db 1 ACTGCAAGGTTGAGCTGGA 19  
 RESULT 900  
 ADR78938  
 ID ADR78938 standard; DNA; 19 BP.  
 XX  
 AC ADR78938;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3423.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3423; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 437 TGGCTTCAACCTGAGGC 455  
 Db 1 TGGCTTCAACCTGAGGC 19

## RESULT 901

ID ADR78988 standard; DNA; 19 BP.  
 AC ADR78988;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3473.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3473; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1060 AGAGCACCACCAATCCACATC 1078  
 Db 1 AGAGCACCACCAATCCACATC 19

## RESULT 902

AD78998  
 ID ADR78998 standard; DNA; 19 BP.  
 AC ADR78998;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3483.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3483; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1225 TCTTGCCACAGCTGATTGA 1243  
Db 1 TCTTGCCACAGCTGATTGA 19  
RESULT 903  
ADR79008  
ID ADR79008 standard; DNA; 19 BP.  
XX  
AC ADR79008;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3493.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3493; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1510 AGGAGCTGCTGACATTGC 1528  
 DB 1 AGGAGCTGCTGACATTGC 19

RESULT 904

ADR79011

ID ADR79011 standard; DNA; 19 BP.

AC ADR79011;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3496.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS  
 XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3496; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1585 ATTGATTCTGCGGGTCAT 1603

DB 1 ATTGATTCTGCGGGTCAT 19

RESULT 905

ADR79029

ID ADR79029 standard; DNA; 19 BP.

XX ADR79029;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3514.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3514; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1835 TTCCACAGGCAGATATTAAAC 1853  
 |||||  
 Db 1 TTCCACAGGCAGATATTAAAC 19  
 RESULT 906  
 ADR79054  
 ID ADR79054 standard; DNA; 19 BP.  
 XX AC ADR79054;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3539.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3539; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.

XX SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2172 TTGCTTCAGCTGACCTCA 2190  
 Db 1 TTGCTTCAGCTGACCTCA 19

RESULT 907

ADR79112

ID ADR79112 standard; DNA; 19 BP.

XX AC ADR79112;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3597.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX PA Manoharan M, Bumcrot D;

XX PI WPI; 2004-677362/66.

XX DR

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery

XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 3597; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2997 ATTGAGACAGGAGTCCT 3015

Db 1 ATTGAGACAGGAGTCCT 19

RESULT 908

ADR79121

ID ADR79121 standard; DNA; 19 BP.

XX AC ADR79121;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3606.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3606; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3235 TAACTCAAGCAGNAGGTGC 3253  
 ||||||||||||||||

Db 1 TAACTCAAGCAGNAGGTGC 19  
 RESULT 909  
 ADR79128  
 ID ADR79128 standard; DNA; 19 BP.  
 XX ADR79128;  
 AC ADR79128;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3613.  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3613.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3606; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3235 TAACTCAAGCAGNAGGTGC 3253  
 ||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.

SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 3382 AGGCGAAAACGCTTACAG 3400  
 Db 1 AGGCGAAAACGCTTACAG 19

RESULT 910

ID ADR79143

AC ADR79143; standard; DNA; 19 BP.

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3628.

XX

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0489612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PN Manoharan M, Bumcrot D;

XX

WO2004080406-A2.

XX

XX WPI; 2004-677362/66.

DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3628; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0;

QY

3565 TGCTTCTCCAAATGGACTC 3583

Db

1 TGCTTCTCCAAATGGACTC 19

XX

RESULT 911

AD79146

ID ADR79146 standard; DNA; 19 BP.

XX

AC ADR79146;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3631.

XX

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX





CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3667 CAGGCACCAATGTAGATAC 3685  
 Db 1 CAGGCACCAATGTAGATAC 19  
 RESULT 913  
 ADR79153  
 ID ADR79153 standard; DNA; 19 BP.  
 AC ADR79153;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3638.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485655P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PF Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3638; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3839 GCTTCAGAGGCATCTGGG 3857

Db 1 GCTTCAGAGGCATCTGGG 19

RESULT 914

ADR79156

ID ADR79156 standard; DNA; 19 BP.

AC ADR79156;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3641.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3641; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 4 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3952 AAAACCTCTTCTTAAAAAG 3970  
 Db 1 AAAACCTCTTCTTAAAAAG 19  
 RESULT 915  
 AD79186  
 ID AD79186 standard; DNA; 19 BP.  
 XX  
 AC AD79186;

XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3671.  
 DE  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3671; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 4 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3952 AAAACCTCTTCTTAAAAAG 3970  
 Db 1 AAAACCTCTTCTTAAAAAG 19  
 RESULT 915  
 AD79186  
 ID AD79186 standard; DNA; 19 BP.  
 XX  
 AC AD79186;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 6 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4459 GAAACAAACCCAGTCTCAAA 4477  
 |||||  
 Db 1 GAAACAAACCCAGTCTCAAA 19

RESULT 916

ADR79193

ID ADR79193 standard; DNA; 19 BP.

XX ADR79193;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3678.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3678; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4579 TCAAGATTGATGGCAGTT 4597

Db 1 TCAAGATTGATGGCAGTT 19

RESULT 917

ADR79205

ID ADR79205 standard; DNA; 19 BP.

XX ADR79205;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3690.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0456665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3690; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4814 GTATGAGAACTACGAGCTG 4832  
 Db 1 GTATGAGAACTACGAGCTG 19  
 RESULT 918  
 AD79479  
 ID ADR79479 standard; DNA; 19 BP.  
 XX  
 AC ADR79479;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3971.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3971; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4814 GTATGAGAACTACGAGCTG 4832  
 Db 1 GTATGAGAACTACGAGCTG 19  
 RESULT 918  
 AD79479  
 ID ADR79479 standard; DNA; 19 BP.  
 XX  
 AC ADR79479;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3971.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3698 TTCCAATTTCCCTGTGGAT 3716

Db 1 TTCCAATTTCCCTGTGGAT 19

RESULT 919

ADR79599

ID ADR79599 standard; DNA; 19 BP.

AC ADR79599;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4093.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4093; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3622 TGGCATGCGCATTTATGATGA 3640

Db 1 TGGCATGCGCATTTATGATGA 19

RESULT 920

ADR79617

ID ADR79617 standard; DNA; 19 BP.

XX ADR79617;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4111.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

PR	09-MAY-2003; 2003US-0469612P.	XX	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
PR	08-AUG-2003; 2003US-0493986P.	XX	coronary artery disease; CAD; coronary heart disease; CHD;
PR	11-AUG-2003; 2003US-0494597P.	XX	atherosclerosis; hepatic glucose production;
PR	26-SEP-2003; 2003US-0506341P.	XX	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
PR	09-OCT-2003; 2003US-0510246P.	XX	colon cancer; lung cancer; neurological disease; Huntington disease;
PR	10-OCT-2003; 2003US-0510318P.	XX	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX	07-NOV-2003; 2003US-0518453P.	XX	
XX	(ALNY-) ALNYLAM PHARM.	XX	Homo sapiens.
PA		XX	WO2004080406-A2.
PI	Manoharan M, Bumcrot D;	XX	
PD	23-SEP-2004.	XX	
DR	WPI; 2004-677362/66.	XX	
XX	Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.	XX	
XX	Example 5; SEQ ID NO 4111; 378pp; English.	XX	
XX	The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.	XX	
XX	Sequence 19 BP; 4 A; 7 C; 2 G; 6 T; 0 U; 0 Other;	XX	
XX	Query Match 0.1%; Score 19; DB 1; Length 19;	XX	
XX	Best Local Similarity 100.0%; Pred. No. 6e+02;	XX	
XX	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX	
QY	2983 TGATCCACCTCTCATTGA 3001	CC	
DB	1 TGATCCACCTCTCATTGA 19	CC	
RESULT 921		CC	
AD979826		CC	
ID	ADR79826 standard; DNA; 19 BP.	CC	
XX		CC	
AC	ADR79826;	CC	
XX		CC	
DT	16-DEC-2004 (first entry)	CC	
XX		CC	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 4320.	CC	
XX		CC	
XX	antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;	CC	
KW	cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;	CC	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	CC	

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 84 CCGAGGCCAGCCGCGAGCC 102
DB 1 CCGAGGCCAGCCGCGAGCC 19

RESULT 922
ADR79848
ID ADR79848 standard; DNA; 19 BP.
XX
AC ADR79848;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4342.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
DR
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 4342; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 3023 TTGCAGCAAGTCTTCCT 3041  
DB 1 TTGCAGCAAGTCTTCCT 19

RESULT 923  
ADR79895  
ID ADR79895 standard; DNA; 19 BP.  
XX  
AC ADR79895;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4391.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-MAR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4342; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4391; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 10 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4449 GAAAAACTTGGAACAAC 4467
Db 1 GAAAAACTTGGAACAAC 19
XX
RESULT 924
AD79984
ID AD79984 standard; DNA; 19 BP.
XX
AC AD79984;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4480.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4480; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 4100 GTCGTGGGATTCCTG 4118  
 Db 1 GTCGTGGGATTCCTG 19

RESULT 925  
 ADR80116  
 ID ADR80116 standard; DNA; 19 BP.  
 XX  
 AC ADR80116;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4612.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4612; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification increases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4829 GCTGACTTTAAATCTGCAC 4847

Db 1 GCTGACTTTAAATCTGCAC 19

RESULT 926

ADR80268

ID ADR80268 standard; DNA; 19 BP.

XX

AC ADR80268;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4765.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

PR

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PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4765; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2217 TTTGAGCCACATTGGAG 2235
Db 1 TTTGAGCCACATTGGAG 19

RESULT 927
ADR80294
ID ADR80294 standard; DNA; 19 BP.
XX
XX ADR80294;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4791.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
OS

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XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465865P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4791; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3525 GCCAGAGTCAGATCTCTCG 3543
Db 1 GCCAGAGTCAGATCTCTCG 19

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RESULT 928  
 ADR80346  
 ID ADR80346 standard; DNA; 19 BP.  
 XX AC  
 XX ADR80346;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4843.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4843; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4439 CAGTCATCTAGAAAACTT 4457

DB 1 CAGTCATCTAGAAAACTT 19

RESULT 929

ADR80353

ID ADR80353 standard; DNA; 19 BP.

XX AC

XX ADR80353;

XX 16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 4850.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

XX Example 5; SEQ ID NO 4843; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

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DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 4850; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4300 TGAAGGCTGACTCTGTGGT 4318
Db 1 TGAAGGCTGACTCTGTGGT 19

RESULT 930
ADR80407
ID ADR80407 standard; DNA; 19 BP.
AC
XX ADR80407;
XX
DT 16-DEC-2004 (first entry)
DE
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4904.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.
XX
PD 23-SEP-2004.

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XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 28-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
DR
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 4904; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4300 TGAAGGCTGACTCTGTGGT 4318
Db 1 TGAAGGCTGACTCTGTGGT 19

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 3698 TTCCAATTTCCTGTGGAT 3716
Db 1 TTCCAATTTCCTGTGGAT 19

RESULT 931
ADR80412

```

ID ADR80412 standard; DNA; 19 BP.  
 AC ADR80412;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4909.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4909; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2744 ACTGGTGCAAAACCCCTCC 2762

Db 1 ACTGGTGCAAAACCCCTCC 19

RESULT 932

ADR80418

ID ADR80418 standard; DNA; 19 BP.

XX

AC ADR80418;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4915.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4915; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3845 GAAGGCATCTGGAGTCTT 3863  
 Db 1 GAAGGCATCTGGAGTCTT 19  
 RESULT 933  
 ADR80717  
 ID ADR80717 standard; DNA; 19 BP.  
 XX  
 AC ADR80717;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5214.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 08-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT  
 PT Example 5; SEQ ID NO 5214; 378pp; English.  
 XX  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4852 ATGGGAAGTATAAGAACTT 4870  
 Db 1 ATGGGAAGTATAAGAACTT 19  
 RESULT 934  
 ADR75551  
 ID ADR75551 standard; DNA; 19 BP.  
 XX  
 XX ADR75551;  
 AC  
 XX

DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 36.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 36; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1105 TGAAGACTCTCCAGAACT 1123  
 Db 1 TGAAGACTCTCCAGAACT 19  
 RESULT 935  
 ADR75644  
 ID ADR75644 standard; DNA; 19 BP.  
 XX  
 AC ADR75644;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 129.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 36; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 328 CTGCTGATTCAGAAGTGC 346  
 Db 1 CTGCTGATTCAGAAGTGC 19

RESULT 936  
 ID ADR75657 standard; DNA; 19 BP.  
 XX AC ADR75657;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 142.  
 XX KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454982P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 142; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 596 CAAGAGGGGCATCATTTCT 614  
 Db 1 CAAGAGGGGCATCATTTCT 19

RESULT 937  
 ID ADR75683  
 XX ADR75683 standard; DNA; 19 BP.  
 XX AC ADR75683;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 168.



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX

(ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 168; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2114 TCCAAATAACTACCTTCCT 2132

Db 1 TCCAAATAACTACCTTCCT 19

RESULT 938

ADR75699

ID ADR75699 standard; DNA; 19 BP.

XX

AC ADR75699;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 184.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

PI WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 184; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 4 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2670 ATATCTTCATCTGGAGTCA 2688  
 Db 1 ATATCTTCATCTGGAGTCA 19  
 |||||

RESULT 939  
 ADNR75716  
 ID ADNR75716 standard; DNA; 19 BP.  
 XX  
 AC ADNR75716;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 201.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 201; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3878 TTTCGAGACCACTCAAT 3896  
 Db 1 TTTCGAGACCACTCAAT 19  
 |||||

RESULT 940  
 ADNR75884  
 ID ADNR75884 standard; DNA; 19 BP.  
 XX  
 AC ADNR75884;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 369.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias; coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 369; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 1 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match

Best Local Similarity 100.0%; Pred. No. 6e-02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 187 TGCTGCTGGCGGCGCCAG 205

|||||

Db 1 TGCTGCTGGCGGCGCCAG 19

RESULT 941

ADR75891

ID ADR75891 standard; DNA; 19 BP.

XX

AC ADR75891;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 376.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

DP 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 376; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 412 GCCAGTGCACCTGAAGA 430  
 Db 1 GCCAGTGCACCTGAAGA 19  
 RESULT 942  
 ADR75899  
 ID ADR75899 standard; DNA; 19 BP.  
 AC ADR75899;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 384.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 384; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 662 TCTGTATACCGTGTATGGA 680  
 Db 1 TCTGTATACCGTGTATGGA 19  
 RESULT 943  
 ADR75902  
 ID ADR75902 standard; DNA; 19 BP.  
 XX  
 AC ADR75902;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 387.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 387; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 8 A; 3 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ Query Match  
 Best Local Similarity 100.0%; Score 19; DB 1; Length 19;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 718 GCAATGTGGCAACAGAAAT 736  
 Db |||||  
 1 GCAATGTGGCAACAGAAAT 19  
 RESULT 944  
 ADR75914  
 ID ADR75914 standard; DNA; 19 BP.  
 XX AC ADR75914;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 399.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cycostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 399; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 1 A; 9 C; 1 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 926 CTTCTGCTTCCTTCCTTAC 944  
 Db 1 CTTCTGCTTCCTTCCTTAC 19  
 RESULT 945  
 ADR75931  
 ID ADR75931 standard; DNA; 19 BP.  
 XX  
 AC ADR75931;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 416.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494579P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 416; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1221 TCTCTTGTGTCACAGCTGA 1239  
 Db 1 TCTCTTGTGTCACAGCTGA 19  
 RESULT 946  
 ADR75934  
 ID ADR75934 standard; DNA; 19 BP.  
 XX  
 AC ADR75934;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 419.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

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PN WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 419; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1258 TCACCTTTACAGCCTTGCT 1276
XX 1 TCACCTTTACAGCCTTGCT 19
XX DB

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RESULT 947
ADR75935
ID ADR75935 standard; DNA; 19 BP.
XX
XX AC ADR75935;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 420.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 420; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1258 TCACCTTTACAGCCTTGCT 1276
XX 1 TCACCTTTACAGCCTTGCT 19
XX DB

```

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1342 CCCTTCGTAGATGTCGT 1360  
 |||||  
 Db 1 CCCTTCGTAGATGTCGT 19

RESULT 948  
 ID ADR75958 standard; DNA; 19 BP.  
 AC ADR75958;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 443.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 FI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 443; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1945 TGGATATCCAGATCTGAA 1963  
 |||||  
 Db 1 TGGATATCCAGATCTGAA 19

RESULT 949  
 ADR75969  
 ID ADR75969 standard; DNA; 19 BP.  
 XX  
 AC ADR75969;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 454.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 454; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 7 A; 3 C; 1 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2101 ATCTTATTATTGATCCAAA 2119  
|||||  
Db 1 ATCTTATTATTGATCCAAA 19  
RESULT 950  
ADR75972  
ID ADR75972 standard; DNA; 19 BP.

XX  
AC ADR75972;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 457.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscle; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
PF 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 457; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 7 A; 3 C; 1 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2101 ATCTTATTATTGATCCAAA 2119  
|||||  
Db 1 ATCTTATTATTGATCCAAA 19  
RESULT 950  
ADR75972  
ID ADR75972 standard; DNA; 19 BP.

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2131 CTAAGAAGCATGCTGAA 2149  
 Db 1 CTAAGAAGCATGCTGAA 19

RESULT 951  
 ADR75974  
 ID ADR75974 standard; DNA; 19 BP.  
 AC ADR75974;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 459.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 459; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 1 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2193 GAGATTGGCTTGGAGGAA 2211  
 Db 1 GAGATTGGCTTGGAGGAA 19

RESULT 952  
 ADR75999  
 ID ADR75999 standard; DNA; 19 BP.  
 XX  
 AC ADR75999;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 484.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

```

PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 484; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2713 TAAAACTGGAAGTAGCCAA 2731
XX |||||
XX Db 1 TAAAACTGGAAGTAGCCAA 19
XX
XX RESULT 953
XX ADR76010
XX ID ADR76010 standard; DNA; 19 BP.
XX
XX XX ADR76010;
XX
XX XX
XX DT 16-DEC-2004 (first entry)

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XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 495.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 495; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3262 CTGAGGCTACCATGACATT 3280  
 |||||  
 Db 1 CTGAGGCTACCATGACATT 19

RESULT 954  
 ADR76251  
 ID ADR76251 standard; DNA; 19 BP.  
 XX  
 AC ADR76251;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 736.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 736; 379pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 237 CTGGTCTGTCCAAAGATG 255  
 |||||  
 Db 1 CTGGTCTGTCCAAAGATG 19

RESULT 955  
 ADR76253  
 ID ADR76253 standard; DNA; 19 BP.  
 XX  
 AC ADR76253;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 738.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 738; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match
XX Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 414 CAGTGCACCCCTGAAGAGG 432
XX | | | | | | | | | | | | | | | | |
XX Db 1 CAGTGCACCCCTGAAGAGG 19
XX
XX RESULT 956
XX AD76274
XX ID AD76274 standard; DNA; 19 BP.
XX
XX AC AD76274;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 759.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

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cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 14-MAR-2003; 2003US-0455050P.  
 17-APR-2003; 2003US-0462894P.  
 25-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 09-MAY-2003; 2003US-0465802P.  
 08-AUG-2003; 2003US-0469612P.  
 11-AUG-2003; 2003US-0493986P.  
 26-SEP-2003; 2003US-0494597P.  
 09-OCT-2003; 2003US-0506341P.  
 10-OCT-2003; 2003US-0510246P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 759; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2427 TCCAAAGAGTCCCGGAAG 2445
DB 1 TCCAAAGAGTCCCGGAAG 19

RESULT 957
ADNR76312
ID ADNR76312 standard; DNA; 19 BP.
XX
AC ADNR76312;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 797.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticongulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
XX
PR 12-MAR-2003; 2003US-0454265P.
XX
PR 13-MAR-2003; 2003US-0454962P.
XX
PR 13-MAR-2003; 2003US-0454962P.
XX
PR 14-APR-2003; 2003US-0462894P.
XX
PR 17-APR-2003; 2003US-0463772P.
XX
PR 25-APR-2003; 2003US-0465665P.
XX
PR 26-SEP-2003; 2003US-0493986P.
XX
PR 11-AUG-2003; 2003US-0506341P.
XX
PR 09-OCT-2003; 2003US-0510246P.
XX
PR 10-OCT-2003; 2003US-0510318P.
XX
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 797; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 343 GTGCCACCAGGATCAACTG 361
DB 1 GTGCCACCAGGATCAACTG 19

RESULT 958
ADNR76334
ID ADNR76334 standard; DNA; 19 BP.
XX
AC ADNR76334;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 819.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticongulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
XX
PR 12-MAR-2003; 2003US-0454265P.
XX
PR 13-MAR-2003; 2003US-0454962P.
XX
PR 13-MAR-2003; 2003US-0454962P.
XX
PR 14-APR-2003; 2003US-0462894P.
XX
PR 17-APR-2003; 2003US-0463772P.
XX
PR 25-APR-2003; 2003US-0465665P.
XX
PR 26-SEP-2003; 2003US-0493986P.
XX
PR 11-AUG-2003; 2003US-0506341P.
XX
PR 09-OCT-2003; 2003US-0510246P.
XX
PR 10-OCT-2003; 2003US-0510318P.
XX
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 797; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

```

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 819; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 588 CTGAACATCAAGAGGGGCA 606  
 Db 1 CTGAACATCAAGAGGGGCA 19  
 RESULT 959  
 ADR76354  
 ID ADR76354 standard; DNA; 19 BP.  
 XX  
 XX ADR76354;  
 AC  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 839.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 839; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 588 CTGAACATCAAGAGGGGCA 606  
 Db 1 CTGAACATCAAGAGGGGCA 19  
 RESULT 959  
 ADR76354  
 ID ADR76354 standard; DNA; 19 BP.  
 XX  
 XX ADR76354;  
 AC  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 839.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 833 GTCAACTCTGATCAGCAGC 851  
Db 1 GTCAACTCTGATCAGCAGC 19

RESULT 960  
ADR76364  
ID ADR76364 standard; DNA; 19 BP.  
XX  
AC ADR76364;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 849.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX  
PS Example 5; SEQ ID NO 849; 378pp; English.  
XX  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 966 GCACAAGTGACACAGACTT 984  
Db 1 GCACAAGTGACACAGACTT 19

RESULT 961  
ADR76378  
ID ADR76378 standard; DNA; 19 BP.  
XX  
AC ADR76378;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 863.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX  
PS Example 5; SEQ ID NO 849; 378pp; English.  
XX  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 863; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1210 AAGCAGTCACATCTCTCTT 1228
Db 1 AAGCAGTCACATCTCTCTT 19

RESULT 962
ADR76382
ID ADR76382 standard; DNA; 19 BP.
XX
XX ADR76382;
AC
XX
XX 16-DEC-2004 (first entry)
DT
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 867.
DE
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX Homo sapiens.
OS
XX WO2004080406-A2.
PN
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
PF
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0456655P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 867; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1241 TGAGGTGTCAGCCCCATC 1259

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Db      1 TTAGGTGCTCAGCCCCCATC 19
|||||
RESULT 963
ADNR76389
ID      ADR76389 standard; DNA; 19 BP.
XX
AC      ADR76389;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 874.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
XX      disease, diabetes, cancer or neurological disease, comprises sense
XX      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 874; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1509 CAGGAGCTGCTGGACATTG 1527  
|||||  
Db 1 CAGGAGCTGCTGGACATTG 19

RESULT 964  
ADNR76397  
ID ADR76397 standard; DNA; 19 BP.  
XX  
AC ADR76397;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 882.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 874; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 882; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1635 ACTCCAGAACTCAAGTCTT 1653
Db 1 ACTCCAGAACTCAAGTCTT 19
RESULT 965
ID ADR76408 standard; DNA; 19 BP.
XX
XX ADR76408;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 893.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosolic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.

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XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 893; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1762 TTCAGACTTTCCTTGATGA 1780
Db 1 TTCAGACTTTCCTTGATGA 19

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RESULT 966
ID ADR76410 standard; DNA; 19 BP.
XX AC
XX ADR76410;
XX DT
XX 16-DEC-2004 (first entry)
XX DE
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 895.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS
XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454982P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 03-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 895; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
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CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1834 CTTACAGGCAGCATATTAA 1852
DB 1 CTTACAGGCAGCATATTAA 19
RESULT 967
ADR76420
ID ADR76420 standard; DNA; 19 BP.
XX AC
XX ADR76420;
XX DT
XX 16-DEC-2004 (first entry)
XX DE
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 905.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS
XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454982P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 03-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 895; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
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PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 905; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1910 TTCCCATATTGCCAATATC 1928

Db 1 TTCCCATATTGCCAATATC 19

RESULT 968

ADR76421

ID ADR76421 standard; DNA; 19 BP.

XX AC ADR76421;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 906.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyrostatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 906; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1911 TTCCCATATTGCCAATATCT 1929

Db 1 TTCCCATATTGCCAATATCT 19

RESULT 969

ADR76454

ID ADR76454 standard; DNA; 19 BP.

XX

AC ADR76454;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 939.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 939; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
 Best Match 0.1%; Score 19; DB 1; Length 19;  
 Query Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2395 TCAGTGTGAGAAAGCTGAT 2413  
 Db 1 TCAGTGTGAGAAAGCTGAT 19  
 RESULT 970  
 ADR76503  
 ID ADR76503 standard; DNA; 19 BP.  
 XX  
 AC ADR76503;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 988.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 939; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 988; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3235 TAACTCAAGCAGAGGTGC 3253
DB 1 TAACTCAAGCAGAGGTGC 19
RESULT 971
ADR76506
ID ADR76506 standard; DNA; 19 BP.
XX
AC ADR76506;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 991.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 991; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3298 GTATGACCTTGTCAGTGA 3316
DB 1 GTATGACCTTGTCAGTGA 19
RESULT 972
ADR76517
ID ADR76517 standard; DNA; 19 BP.
XX
AC ADR76517;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1002.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1002; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 12 A; 2 C; 5 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3465 GACACAAAGGAGAAAGAA 3483  
 Db 1 GACACAAAGGAGAAAGAA 19  
 RESULT 973  
 ADR76528  
 ID ADR76528 standard; DNA; 19 BP.  
 XX  
 AC ADR76528;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1013.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1013; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4018 AGATTCTTTCCTTTTGG 4036  
|||||  
Db 1 AGATTCTTTCCTTTTGG 19

RESULT 974  
ADR76673  
ID ADR76673 standard; DNA; 19 BP.  
XX AC ADR76673;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1158.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1158; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2983 TGATCCCACTCTCATTTGA 3001  
|||||  
Db 1 TGATCCCACTCTCATTTGA 19

RESULT 975  
ADR76821  
ID ADR76821 standard; DNA; 19 BP.  
XX AC ADR76821;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1306.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 08-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1306; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4817 TGAGAACTACGAGCTGACT 4835  
 Db 1 TGAGAACTACGAGCTGACT 19  
 RESULT 976  
 ADR76888  
 ID ADR76888 standard; DNA; 19 BP.  
 XX  
 AC ADR76888;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1373.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1373; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 398 CATCTGTAAGACCGCCAG 416

Db 1 CATCTGTAAGACCGCCAG 19

RESULT 977

ADR76919

ID ADR76919 standard; DNA; 19 BP.

AC ADR76919;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1404.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0485665P.

XX 25-APR-2003; 2003US-0485802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1404; 378pp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1679 AAAGCCATCATCTGATGTC 1697

Db 1 AAAGCCATCATCTGATGTC 19

RESULT 978

ADR76949

ID ADR76949 standard; DNA; 19 BP.

XX ADR76949;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1434.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1434; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 9 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2495 CCATGACCTCCAGCTCCTG 2513  
 |||||  
 Db 1 CCATGACCTCCAGCTCCTG 19  
 RESULT 979  
 ADR77040  
 ID ADR77040 standard; DNA; 19 BP.  
 XX  
 AC ADR77040;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1525.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1525; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4100 GTCTGGGATTCATCTG 4118

DB 1 GTCTGGGATTCATCTG 19

RESULT 980

ID ADR77317

AD ADR77317 standard; DNA; 19 BP.

XX AC ADR77317;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1802.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0452894P.

PR 17-APR-2003; 2003US-0453772P.

PR 25-APR-2003; 2003US-0456655P.

PR 25-APR-2003; 2003US-045802P.

PR 09-MAY-2003; 2003US-0459612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1802; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1299 TCCACTCACATCTCCAGT 1317

DB 1 TCCACTCACATCTCCAGT 19

RESULT 981

AD ADR77362

AD ADR77362 standard; DNA; 19 BP.

XX AC ADR77362;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1847.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1847; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX DB 1 AAAGCAGCGCGAAGCTGTT 19  
 DB RESULT 982  
 DB ADR77407  
 ID ADR77407 standard; DNA; 19 BP.  
 XX ADR77407;  
 AC ADR77407;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1892.  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1892.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1847; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

Oy 1085 AAAGCAGCGCGAAGCTGTT 1103  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 4552 AGAAACAGCATTGTTGT 4570  
 |||||  
 Db 1 AGAAACAGCATTGTTGT 19

RESULT 983

ADNR77427  
 ID ADR77427 standard; DNA; 19 BP.

XX AC ADR77427;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1912.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0510318P.  
 XX PR 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX PN Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1912; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 1996 AACTTCCAACTGTCATGGA 2014  
 |||||  
 Db 1 AACTTCCAACTGTCATGGA 19

RESULT 984

ADNR77452  
 ID ADR77452 standard; DNA; 19 BP.

XX AC ADR77452;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1937.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX PA Manoharan M, Bumcrot D;  
XX PI WPI; 2004-677362/66.  
XX DR  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 1937; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX CC levels or glucose-6-phosphate levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
XX CC The subject is suffering from a disorder characterised by elevated or  
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX CC lung cancer), neurological disease (e.g., Huntington disease or  
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX CC can be used to control ApoB gene expression.  
XX SQ Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 4272 CATTTCAGCCTTCGGGCTC 4290  
| | | | | | | | | | | | | | | | | | | | | |  
Db 1 CATTTCAGCCTTCGGGCTC 19  
RESULT 985

ADR77474  
ID ADR77474 standard; DNA; 19 BP.  
XX AC ADR77474;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1959.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
XX KW atherosclerosis; hepatic glucose production;  
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX PA Manoharan M, Bumcrot D;  
XX PI WPI; 2004-677362/66.  
XX DR  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 1959; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX CC levels or glucose-6-phosphate levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
XX CC The subject is suffering from a disorder characterised by elevated or  
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
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XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX CC lung cancer), neurological disease (e.g., Huntington disease or  
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX CC can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3845 GAAGGCATCTGGAGTCTT 3863  
 DB 1 GAAGGCATCTGGAGTCTT 19  
 RESULT 986  
 ADR77566  
 ID ADR77566 standard; DNA; 19 BP.  
 XX  
 AC ADR77566;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2051.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2051; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4740 GAAGATGGAACCCCTCTCCC 4758  
 DB 1 GAAGATGGAACCCCTCTCCC 19  
 RESULT 987  
 ADR77841  
 ID ADR77841 standard; DNA; 19 BP.  
 XX  
 AC ADR77841;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2326.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2326; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;  
  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
 QY 4745 TGGAACTCTCCCTCACC 4763  
 Db 1 TGGAACTCTCCCTCACC 19  
 |||||  
  
 RESULT 988  
 ADDR77948  
 ID ADDR77948 standard; DNA; 19 BP.  
 XX  
 AC ADDR77948;

XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2433.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2433; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;  
  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
 QY 4745 TGGAACTCTCCCTCACC 4763  
 Db 1 TGGAACTCTCCCTCACC 19  
 |||||  
  
 RESULT 988  
 ADDR77948  
 ID ADDR77948 standard; DNA; 19 BP.  
 XX  
 AC ADDR77948;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 1943 ATTGGATATCCAGATCTG 1961  
 |||||  
 Db 1 ATTGGATATCCAGATCTG 19

## RESULT 989

ADR78152

ID ADR78152 standard; DNA; 19 BP.

XX ADR78152;

AC ADR78152;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2637.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

OS  
 XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465669P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2637; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 222 CTGGAATAATGTCAGCCTGG 240  
 |||||  
 Db 1 CTGGAATAATGTCAGCCTGG 19

## RESULT 990

ADR78173

ID ADR78173 standard; DNA; 19 BP.

XX ADR78173;

AC ADR78173;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2658.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

OS  
 XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-04659612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2658; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1234 AGCTGATTGAGGTGTCAC 1252  
 Db 1 AGCTGATTGAGGTGTCAC 19  
 RESULT 991  
 AD78192  
 ID ADR78192 standard; DNA; 19 BP.  
 XX  
 AC ADR78192;  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2677.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452882P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2677; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1234 AGCTGATTGAGGTGTCAC 1252  
 Db 1 AGCTGATTGAGGTGTCAC 19  
 RESULT 991  
 AD78192  
 ID ADR78192 standard; DNA; 19 BP.  
 XX  
 AC ADR78192;  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2677.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3383 GGGCAAAACGCTTACAGA 3401

Db 1 GGGCAAAACGCTTACAGA 19

RESULT 992

ADR78193

ID ADR78193 standard; DNA; 19 BP.

XX ADR78193;

AC ADR78193;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2678.

XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2678; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3405 ACCCTGCACATTCAGAAC 3423

Db 1 ACCCTGCACATTCAGAAC 19

RESULT 993

ADR78237

ID ADR78237 standard; DNA; 19 BP.

XX ADR78237;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2722.

DE antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2722; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2426 ATCCAAAGAGTCCCGGAA 2444  
 Db 1 ATCCAAAGAGTCCCGGAA 19  
 RESULT 994  
 ADR78257  
 ID ADR78257 standard; DNA; 19 BP.  
 XX  
 AC ADR78257;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2742.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2742; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 211 AAGAGGAATGCTGGAAAA 229
Db 1 AAGAGGAATGCTGGAAAA 19

RESULT 995
ADR78270
ID ADR78270 standard; DNA; 19 BP.
XX
AC ADR78270;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2755.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510248P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2755; 379pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 397 TCATCCTCGAGACCAGCCA 415
Db 1 TCATCCTCGAGACCAGCCA 19

RESULT 996
ADR78290
ID ADR78290 standard; DNA; 19 BP.
XX
AC ADR78290;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2775.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510248P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2755; 379pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2775; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD),
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 4 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1473 GTCACCAACTATCATAGA 1491
Db 1 GTCACCAACTATCATAGA 19
|||||
RESULT 997
AD78310
ID AD78310 standard; DNA; 19 BP.
XX
XX AC AD78310;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2795.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2795; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD),
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 4 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1473 GTCACCAACTATCATAGA 1491
Db 1 GTCACCAACTATCATAGA 19
|||||
RESULT 997
AD78310
ID AD78310 standard; DNA; 19 BP.
XX
XX AC AD78310;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2795.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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Qy 2373 GATATGCTAAATGAATAA 2391  
 Db 1 GATATGCTAAATGAATAA 19

RESULT 998  
 ADR78329 standard; DNA; 19 BP.  
 XX ADR78329;  
 AC ADR78329;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2814.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2814; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 0 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3640 AAGAGAAGATTGAATTGA 3658  
 Db 1 AAGAGAAGATTGAATTGA 19

RESULT 999  
 ADR78336  
 ID ADR78336 standard; DNA; 19 BP.  
 XX  
 AC ADR78336;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2821.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2814; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

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PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2821; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 7 C; 1 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3937 ACTTCACATCCCGAGAAA 3955
DB 1 ACTTCACATCCCGAGAAA 19

RESULT 1000
AD78343
ID ADR78343 standard; DNA; 19 BP.
XX
AC ADR78343;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2828.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.

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XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465865P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2828; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4260 ACCAGCAGACACCATTTCA 4278
DB 1 ACCAGCAGACACCATTTCA 19

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DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3024; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1104 TTGAAGACTCTCCAGGAAC 1122
Db 1 TTGAAGACTCTCCAGGAAC 19
RESULT 1003
ADR78576
ID ADR78576 standard; DNA; 19 BP.
XX
AC ADR78576;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3061.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.
XX
PD 23-SEP-2004.

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3061; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1945 TGGATATCCAGATCTGAA 1963
Db 1 TGGATATCCAGATCTGAA 19

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RESULT 1004
ADR78585

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ID ADR78585 standard; DNA; 19 BP.  
 AC ADR78585;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3070.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3070; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 8 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2075 CCCAGCCTCAGCCAAATA 2093  
 DB 1 CCCAGCCTCAGCCAAATA 19  
 RESULT 1005  
 ADR78605  
 ID ADR78605 standard; DNA; 19 BP.  
 XX  
 AC ADR78605;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3090.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3070; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 3090; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2606 TCTTCATCATCTTCATG 2624
XX Db 1 TCTTCATCATCTTCATG 19
XX
XX RESULT 1006
XX ADR78611
XX ID ADR78611 standard; DNA; 19 BP.
XX AC ADR78611;
XX XX
XX DT 16-DEC-2004 (first entry)
XX XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3096.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3096; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2636 TGAATCTCCCTGAGCT 2654
XX Db 1 TGAATCTCCCTGAGCT 19
XX
XX RESULT 1007
XX ADR78651
XX ID ADR78651 standard; DNA; 19 BP.
XX
XX AC ADR78651;
XX
XX

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DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3136.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3136; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3668 AGGCACCAATGTAGATACC 3686  
 Db 1 AGGCACCAATGTAGATACC 19  
 RESULT 1008  
 ADR78661  
 ID ADR78661 standard; DNA; 19 BP.  
 XX  
 XX ADR78661;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3146.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3136; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4025 TTTCCTTTTGGTGCAAA 4043  
 Db 1 TTTCCTTTTGGTGCAAA 19

RESULT 1009  
 ADR78672  
 ID ADR78672 standard; DNA; 19 BP.  
 AC ADR78672;  
 XX  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3157.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3157; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4348 CTGGAGAACACATATGA 4366  
 Db 1 CTGGAGAACACATATGA 19

RESULT 1010  
 ADR78676  
 ID ADR78676 standard; DNA; 19 BP.  
 XX  
 XX ADR78676;  
 AC  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3161.  
 XX



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3161; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4509 TGGGACCACAGATGCTGTG 4527  
 Db 1 TGGGACCACAGATGCTGTG 19  
 RESULT 1011  
 ADR78881  
 ID ADR78881 standard; DNA; 19 BP.  
 XX  
 XX ADR78881;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3366.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3366; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1510 AGGAGCTGCTGGACATTGC 1528  
 |||||  
 Db 1 AGGAGCTGCTGGACATTGC 19

RESULT 1012  
 ADR78920  
 ID ADR78920 standard; DNA; 19 BP.  
 XX  
 AC ADR78920;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3405.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3405; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 8 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 48 GCTGAGAGCCGCCCCAGC 66  
 |||||  
 Db 1 GCTGAGAGCCGCCCCAGC 19

RESULT 1013  
 ADR78948  
 ID ADR78948 standard; DNA; 19 BP.  
 XX  
 AC ADR78948;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3433.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3433; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 538 AAGGGAAGCAGGTTTCT 556  
 Db 1 AAGGGAAGCAGGTTTCT 19  
 RESULT 1014  
 ADR78956  
 ID ADR78956 standard; DNA; 19 BP.  
 XX  
 AC ADR78956;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3441.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3441; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 6 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 625 TTCCCCCAGACAGACAGA 643  
 Db 1 TTCCCCCAGACAGACAGA 19

RESULT 1015  
 ADR78964  
 ID ADR78964 standard; DNA; 19 BP.  
 XX  
 AC ADR78964;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3449.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3449; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 2 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 708 ACAGGAAGGGCAATGTGG 726  
 Db 1 ACAGGAAGGGCAATGTGG 19

RESULT 1016  
 ADR78970  
 ID ADR78970 standard; DNA; 19 BP.  
 XX  
 AC ADR78970;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3455.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WC2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3455; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 788 AGGCATCAGCCCACTTGCT 806  
 |||||  
 Db 1 AGGCATCAGCCCACTTGCT 19  
 RESULT 1017  
 ADR78999  
 ID ADR78999 standard; DNA; 19 BP.  
 XX ADR78999;  
 AC ADR78999;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3484.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3484; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1226 CTTGCCACACGCTGATTGAG 1244  
 Db 1 CTTGCCACACGCTGATTGAG 19  
 RESULT 1018  
 ADR79002  
 ID ADR79002 standard; DNA; 19 BP.  
 XX AC ADR79002;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3487.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW - cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0489612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3487; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1306 ACATCTCCAGTCGCTGAA 1324  
 Db 1 ACATCTCCAGTCGCTGAA 19  
 RESULT 1019  
 ADR79020  
 ID ADR79020 standard; DNA; 19 BP.  
 XX AC ADR79020;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3505.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3505; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1695 ATCCAGAAAGTGGCATCC 1713  
 Db 1 ATCCAGAAAGTGGCATCC 19

RESULT 1020  
 ADR79040  
 ID ADR79040 standard; DNA; 19 BP.  
 XX  
 AC ADR79040;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3525.  
 XX  
 KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-Hiv;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3525; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1918 TTGCCAATATCTTGAATC 1936  
 Db 1 TTGCCAATATCTTGAATC 19  
 |||||

RESULT 1021  
 ADR79063  
 ID ADR79063 standard; DNA; 19 BP.  
 XX  
 AC ADR79063;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3548.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-045665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3548; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2239 TTTTGGGAGCAAGGATT 2257  
 Db 1 TTTTGGGAGCAAGGATT 19  
 |||||

RESULT 1022  
 ADR79074  
 ID ADR79074 standard; DNA; 19 BP.  
 XX  
 AC ADR79074;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3559.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-045665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.



```

PF 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3559; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 1 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2397 AGTGTGAGAGCTGATTA 2415
XX
XX Db 1 AGTGTGAGAGCTGATTA 19
XX
XX RESULT 1023
XX ADR79077
XX ID ADR79077 standard; DNA; 19 BP.

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XX
XX ADR79077;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3562.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3562; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 1 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2397 AGTGTGAGAGCTGATTA 2415
XX
XX Db 1 AGTGTGAGAGCTGATTA 19
XX
XX RESULT 1023
XX ADR79077
XX ID ADR79077 standard; DNA; 19 BP.

```



PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-SEP-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3588; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2851 AGTCGGGCTCGAGGCTCA 2869  
 Db 1 AGTCGGGCTCGAGGCTCA 19  
 RESULT 1026  
 ADR79135  
 ID ADR79135 standard; DNA; 19 BP.  
 XX  
 AC ADR79135;  
 XX  
 DT 16-DEC-2004 (first entry)

XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3620.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3620; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2851 AGTCGGGCTCGAGGCTCA 2869  
 Db 1 AGTCGGGCTCGAGGCTCA 19  
 RESULT 1026  
 ADR79135  
 ID ADR79135 standard; DNA; 19 BP.  
 XX  
 AC ADR79135;  
 XX  
 DT 16-DEC-2004 (first entry)

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 12 A; 2 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3465 GACACAAAGGAGAGAAAGAA 3483  
 Db 1 GACACAAAGGAGAGAAAGAA 19

RESULT 1027  
 ADR79147  
 ID ADR79147 standard; DNA; 19 BP.  
 XX  
 AC ADR79147;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3632.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; Diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3632; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3641 AGAGAGAGATTGAATTTGAA 3659  
 Db 1 AGAGAGAGATTGAATTTGAA 19

RESULT 1028  
 ADR79158  
 ID ADR79158 standard; DNA; 19 BP.  
 XX  
 AC ADR79158;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3643.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; Diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3632; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3643; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3981 GTCAATATACCTTGAAACA 3999  
 DB 1 GTCAATATACCTTGAAACA 19  
 |||||||||  
 RESULT 1029  
 ADR79161  
 ID ADR79161 standard; DNA; 19 BP.  
 XX  
 AC ADR79161;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3646.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3646; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3981 GTCAATATACCTTGAAACA 3999  
 DB 1 GTCAATATACCTTGAAACA 19  
 |||||||||  
 RESULT 1029  
 ADR79161  
 ID ADR79161 standard; DNA; 19 BP.  
 XX  
 AC ADR79161;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3646.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4006 GTTTGAAATGTGAGATCC 4024  
 |||||  
 Db 1 GTTTGAAATGTGAGATCC 19

RESULT 1030  
 ID ADR79180 standard; DNA; 19 BP.  
 XX AC ADR79180;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3665.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0493986P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 08-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX DR WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX SS Example 5; SEQ ID NO 3665; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4329 TCCTACAATGTGCAAGGAT 4347  
 |||||  
 Db 1 TCCTACAATGTGCAAGGAT 19

RESULT 1031  
 ADR79194  
 ID ADR79194 standard; DNA; 19 BP.  
 XX AC ADR79194;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3679.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0493986P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 08-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX DR WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX SS Example 5; SEQ ID NO 3665; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3679; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4596 TTCAGAGTCTCTCTCTCTCT 4614  
 DB 1 TTCAGAGTCTCTCTCTCTCT 19  
 RESULT 1032  
 ADR79200  
 ID ADR79200 standard; DNA; 19 BP.  
 XX  
 AC ADR79200;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3685.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 05-AUG-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3685; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 9 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4596 TTCAGAGTCTCTCTCTCTCT 4614  
 DB 1 TTCAGAGTCTCTCTCTCTCT 19  
 RESULT 1032  
 ADR79200  
 ID ADR79200 standard; DNA; 19 BP.  
 XX  
 AC ADR79200;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3685.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4702 CCTACTCTCCAGGACCACCA 4720  
DB 1 CCTACTCTCCAGGACCACCA 19  
RESULT 1033  
ADNR79499  
ID ADNR79499 standard; DNA; 19 BP.  
XX  
AC ADNR79499;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3991.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3991; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1179 CTGGTTACTGAGCTGAGAG 1197  
DB 1 CTGGTTACTGAGCTGAGAG 19  
RESULT 1034  
ADNR79561  
ID ADNR79561 standard; DNA; 19 BP.  
XX  
AC ADNR79561;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4053.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3991; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where



```

PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4053; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4571 CAAAGAAGTCAAGATTGAT 4589
DB 1 CAAAGAAGTCAAGATTGAT 19
|||||
RESULT 1035
ADR79866
ID ADR79866 standard; DNA; 19 BP.
XX
XX ADR79866;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4362.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyrostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-045802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4362; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2087 CAAATAGAGGAATCTT 2105

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Db      1 CAAATAGAGGGAATCTT 19
|||||
RESULT 1036
ADR80037
ID      ADR80037 standard; DNA; 19 BP.
XX
AC      ADR80037;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 4533.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 4533; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity, a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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CC      is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC      The subject is suffering from a disorder characterised by elevated or
CC      otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC      levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC      disorder is chosen from the HDL/LDL cholesterol imbalance,
CC      dyslipidaemias, hypercholesterolaemia, statin-resistant
CC      hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC      disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC      inhibit hepatic glucose production or for treating glucose-metabolism-
CC      related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC      treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC      lung cancer), neurological disease (e.g., Huntington disease or
CC      spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC      represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC      can be used to control ApoB gene expression.
XX
SQ      Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      4439 CAGTCATGTAGAAAACTT 4457
DB      1 CAGTCATGTAGAAAACTT 19
|||||
RESULT 1037
ADR80457
ID      ADR80457 standard; DNA; 19 BP.
XX
AC      ADR80457;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 4954.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 4533; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity, a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4954; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4072 CTGTTAGGACACCGCCCT 4090
XX |||||
XX Db 1 CTGTTAGGACACCGCCCT 19
XX
XX RESULT 1038
XX ADR80633
XX ID ADR80633 standard; DNA; 19 BP.
XX AC ADR80633;
XX XX
XX 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5130.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX
XX W02004080406-A2.

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XX PD 23-SEP-2004.
XX XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 5130; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2087 CAAAATAGAGGGAATCTT 2105
XX |||||
XX Db 1 CAAAATAGAGGGAATCTT 19

```

RESULT 1039  
 ADR75545 standard; DNA; 19 BP.  
 AC ADR75545;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 30.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 30; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 577 CTACTTACATCCTGGAACAT 595  
 Db 1 CTACTTACATCCTGGAACAT 19  
 RESULT 1040  
 ADR75564  
 ID ADR75564 standard; DNA; 19 BP.  
 XX  
 AC ADR75564;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 49.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 30; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 49; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2340 TTGGCTATACCAAGATG 2358

DB 1 TTGGCTATACCAAGATG 19

RESULT 1041

ADR75619

ID ADR75619 standard; DNA; 19 BP.

XX AC ADR75619;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 104.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 104; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2426 ATCCAAAGAGTCCCGAA 2444

DB 1 ATCCAAAGAGTCCCGAA 19

RESULT 1042

ADR75626

ID ADR75626 standard; DNA; 19 BP.

XX

AC ADR75626;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 111.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 111; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 11 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4755 TCCTCACCTCCACCTCTG 4773  
 |||||  
 DB 1 TCCTCACCTCCACCTCTG 19  
 RESULT 1043  
 ADR75638  
 ID ADR75638 standard; DNA; 19 BP.  
 XX  
 AC ADR75638;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 123.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 111; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 123; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 10 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 188 GCTGTCGGCGGCGCAGG 206
XX Db 1 GCTGTCGGCGGCGCAGG 19
XX
XX RESULT 1044
XX ADR75681
XX ID ADR75681 standard; DNA; 19 BP.
XX AC ADR75681;
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 166.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 166; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2004 ACTGTCATGCACTTCAGAA 2022
XX Db 1 ACTGTCATGCACTTCAGAA 19
XX
XX RESULT 1045
XX ADR75689
XX ID ADR75689 standard; DNA; 19 BP.
XX
XX AC ADR75689;
XX
XX DT 16-DEC-2004 (first entry)
XX

```

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 174.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US0007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 25-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 174; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX

XX Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

XX

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2264 AGACAGTGTCAACAAAGCT 2282

DB 1 AGACAGTGTCAACAAAGCT 19

RESULT 1046

ADR75697

ID ADR75697 standard; DNA; 19 BP.

XX

AC ADR75697;

XX

DT 16-DEC-2004 (first entry)

DE

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 182.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US0007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 25-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 174; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2593 AGAATGACATTTTCTTCA 2611

Db 1 AGAATGACATTTTCTTCA 19

RESULT 1047

AD75698

ID AD75698 standard; DNA; 19 BP.

XX AC

AD75698;

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 183.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

PN

23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

07-MAR-2003; 2003US-0452682P.

PR

12-MAR-2003; 2003US-0454265P.

PR

13-MAR-2003; 2003US-0454962P.

PR

14-MAR-2003; 2003US-0455050P.

PR

17-APR-2003; 2003US-0452894P.

PR

25-APR-2003; 2003US-0456656P.

PR 25-APR-2003; 2003US-0455802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 183; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2637 GAATCCCACTGGAGCTG 2655

Db 1 GAATCCCACTGGAGCTG 19

RESULT 1048

AD75713

ID AD75713 standard; DNA; 19 BP.

XX

AD75713;

XX

DT 16-DEC-2004 (first entry)

XX

Human apolipoprotein B (ApoB) oligonucleotide seqid 198.

DE

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 198; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 6 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3693 ATGACTTCCAATTTCCTG 3711  
 |||||  
 DB 1 ATGACTTCCAATTTCCTG 19  
 RESULT 1049  
 ADR75714  
 ID ADR75714 standard; DNA; 19 BP.  
 XX  
 AC ADR75714;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 199.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 199; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Gaps 0;  
 QY 3696 ACTTCCAAATTCCTGTGG 3714  
 Db 1 ACTTCCAAATTCCTGTGG 19  
 RESULT 1050  
 ADR75889  
 ID ADR75889 standard; DNA; 19 BP.  
 XX  
 AC ADR75889;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 374.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; as.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493868P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 374; 379pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 368 TGAGCTGGAGGTTCCCCAG 386  
 Db 1 TGAGCTGGAGGTTCCCCAG 19  
 RESULT 1051  
 ADR75910  
 ID ADR75910 standard; DNA; 19 BP.  
 XX  
 AC ADR75910;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 395.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; as.

KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 395; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 829 CCTTGTCACCTCTGATCAG 847  
 |||||  
 Db 1 CCTTGTCACCTCTGATCAG 19  
 RESULT 1052  
 ADR75930  
 ID ADR75930 standard; DNA; 19 BP.  
 XX  
 AC ADR75930;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 415.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 415; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1220 ATCTCTCTGCCACAGCTG 1238

Db 1 ATCTCTCTGCCACAGCTG 19

RESULT 1053

AD75940

ID AD75940 standard; DNA; 19 BP.

XX

AC AD75940;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 425.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

PN

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX

PI WPI; 2004-677362/66.

XX

DR

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 425; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1556 TGACTGCACCTGGGGATGAA 1574

Db 1 TGACTGCACCTGGGGATGAA 19

RESULT 1054

AD75961

ID AD75961 standard; DNA; 19 BP.

XX

AC AD75961;

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 446.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 446; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 SQ 0.1%; Score 19; DB 1; Length 19;  
 Query Match 100.0%; Pred. No. 6e+02;  
 Best Local Similarity 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; |||||

Db 1 CAAGATCTGAAAAAGTTAG 19  
 RESULT 1055  
 ADR76009  
 ID ADR76009 standard; DNA; 19 BP.  
 XX ADR76009;  
 AC 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 494.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 494; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 SQ 0.1%; Score 19; DB 1; Length 19;  
 Query Match 100.0%; Pred. No. 6e+02;  
 Best Local Similarity 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; |||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 3218 GGATACCTGAAGTTTGTA 3236  
 |||||  
 Db 1 GGATACCTGAAGTTTGTA 19

RESULT 1056

ADR76011

ID ADR76011 standard; DNA; 19 BP.

XX AC ADR76011;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 496.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0465802P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 496; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0;

QY 3307 TGTCAGTGAAGTCCAAAT 3325

|||||

Db 1 TGTCAGTGAAGTCCAAAT 19

RESULT 1057

ADR76021

ID ADR76021 standard; DNA; 19 BP.

XX AC ADR76021;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 506.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 506; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3512 TTTTCAGCAGAGCCACA 3530  
 Db 1 TTTTCAGCAGAGCCACA 19  
 RESULT 1058

ADR76034  
 ID ADR76034 standard; DNA; 19 BP.  
 XX  
 AC ADR76034;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 519.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 519; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 4 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3686 CAAAAAATGACTTCCAAT 3704  
 Db 1 CAAAAAATGACTTCCAAT 19  
 RESULT 1059  
 ADR76042  
 ID ADR76042 standard; DNA; 19 BP.  
 XX  
 AC ADR76042;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 527.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 527; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4010 GAAATTTGAGATTCCTTG 4028  
 Db 1 GAAATTTGAGATTCCTTG 19  
 RESULT 1060  
 ADR76058  
 ID ADR76058 standard; DNA; 19 BP.  
 XX  
 AC ADR76058;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 543.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 543; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4509 TGGGGACCACAGATGCTCG 4527  
 Db 1 TGGGGACCACAGATGCTCG 19  
 RESULT 1061  
 ID AD76059 standard; DNA; 19 BP.  
 XX  
 AC AD76059;

XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 544.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 PD  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 544; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4509 TGGGGACCACAGATGCTCG 4527  
 Db 1 TGGGGACCACAGATGCTCG 19  
 RESULT 1061  
 ID AD76059 standard; DNA; 19 BP.  
 XX  
 AC AD76059;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4654 CTAACACTGCGCGCTCAA 4672  
 Db 1 CTAACACTGCGCGCTCAA 19

RESULT 1062

ADNR76259 ID ADR76259 standard; DNA; 19 BP.

XX AC ADR76259;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 744.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 744; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1123 TGAATAAACTAACCATCTC 1141

Db 1 TGAATAAACTAACCATCTC 19

RESULT 1063

ADNR76276 ID ADR76276 standard; DNA; 19 BP.

XX AC ADR76276;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 761.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 761; 378pp; English.
XX
XX The invention describes a RNA interference (irRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2593 AGAATGACTTTTCTTCA 2611
XX |||||
XX Db 1 AGAATGACTTTTCTTCA 19
XX
XX RESULT 1064
XX ADR76277
XX ID ADR76277 standard; DNA; 19 BP.
XX
XX AC ADR76277;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 762.

```

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 762; 378pp; English.

The invention describes a RNA interference (irRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2593 AGAATGACTTTTCTTCA 2611  
|||||

Db 1 AGAATGACTTTTCTTCA 19

RESULT 1064

ADR76277

ID ADR76277 standard; DNA; 19 BP.

AC ADR76277;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 762.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2775 TTTGTGACAAATATGGCA 2793

Db 1 TTTGTGACAAATATGGCA 19

RESULT 1065

ID ADR76280  
 ID ADR76280 standard; DNA; 19 BP.

AC ADR76280;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 765.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493988P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-05118453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 765; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3691 AAATGACTTCCAATTCC 3709

Db 1 AAATGACTTCCAATTCC 19

RESULT 1066

ADR76283

ID ADR76283 standard; DNA; 19 BP.

AC ADR76283;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 768.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
PA  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
DR  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 768; 378pp; English.  
XX  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 4561 ATTTGTTGTCAAGAAGT 4579  
XX |||||  
XX Db 1 ATTTGTTGTCAAGAAGT 19  
XX  
XX RESULT 1067  
XX ADR76316  
XX ID ADR76316 standard; DNA; 19 BP.  
XX  
XX AC ADR76316;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 801.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cyotactic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
PN  
XX 23-SEP-2004.  
PD  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
PF  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
PA  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
DR  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 801; 378pp; English.  
XX  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 4561 ATTTGTTGTCAAGAAGT 4579  
XX |||||  
XX Db 1 ATTTGTTGTCAAGAAGT 19  
XX  
XX RESULT 1067  
XX ADR76316  
XX ID ADR76316 standard; DNA; 19 BP.  
XX  
XX AC ADR76316;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 801.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cyotactic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; RNA; antisense technology; lipid metabolism;

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 393 AGCTTCATCTCTGAGACCA 411
DB 1 AGCTTCATCTCTGAGACCA 19

RESULT 1068
ADR76327
ID ADR76327 standard; DNA; 19 BP.
XX
AC ADR76327;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 812.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510245P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 812; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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```

CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 500 AGCCATGTCGAGTATGAG 518
DB 1 AGCCATGTCGAGTATGAG 19

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RESULT 1069

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ID ADR76350 standard; DNA; 19 BP.
XX
AC ADR76350;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 835.
XX

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KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0506341P.

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QY      1097 AGCTGTTTGAAGACTCTC 1115
Db      1 AGCTGTTTGAAGACTCTC 19

RESULT 1071
ADR76376
ID      ADR76376 standard; DNA; 19 BP.
XX
AC      ADR76376;
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 861.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Mancharan M, Buncrot D;
XX
DR      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidaemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 861; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device

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that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. NO. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1186 CTGAGCTGAGAGGCTCTCAG 1204  
|||||  
Db 1 CTGAGCTGAGAGGCTCTCAG 19

RESULT 1072  
ADR76391  
ID ADR76391 standard; DNA; 19 BP.  
XX  
AC ADR76391;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 876.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Mancharan M, Buncrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 861; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device

```

PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX DR WPI; 2004-677362/66.
XX
XX PS Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 876; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1515 CTGCTGGACATTGCTAATT 1533
DB 1 CTGCTGGACATTGCTAATT 19
XX
RESULT 1073
AD76418
ID AD76418 standard; DNA; 19 BP.
XX
XX AC AD76418;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 903.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.

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XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX DR WPI; 2004-677362/66.
XX
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 903; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1902 TTGTGGCTTCCCATATTG 1920
DB 1 TTGTGGCTTCCCATATTG 19
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX

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RESULT 1074  
 ADR76440  
 ID ADR76440 standard; DNA; 19 BP.  
 XX AC ADR76440;  
 XX AC ADR76440;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 925.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 925; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a modification with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2219 TGAGCCCAACATTGGAAGCT 2237  
 Db 1 TGAGCCCAACATTGGAAGCT 19  
 RESULT 1075  
 ADR76487  
 ID ADR76487 standard; DNA; 19 BP.  
 XX AC ADR76487;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 972.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 925; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a modification with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 972; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2879 AAAAGCTGGGAAGCTGAAG 2897
Db 1 AAAAGCTGGGAAGCTGAAG 19
RESULT 1076
AD76905
XX AD76905 standard; DNA; 19 BP.
XX
XX AD76905;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1390.
DE
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; RNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.
XX
XX 23-SEP-2004.
XX

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XX PF 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-046612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Example 5; SEQ ID NO 1390; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 3498 ATTTCCATACCCCGTTTC 3516
Db 1 ATTTCCATACCCCGTTTC 19
RESULT 1077
AD76974

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ID ADR76974 standard; DNA; 19 BP.  
 AC ADR76974;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1459.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1459; 379pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3624 GCATGGCATTATGATGAAG 3642

Db 1 GCATGGCATTATGATGAAG 19

RESULT 1078

ADR77006

ID ADR77006 standard; DNA; 19 BP.

XX

AC ADR77006;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1491.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 1491; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2887 GGAAGCTGAAGTTTATCAT 2905
XX DB 1 GGAAGCTGAAGTTTATCAT 19
XX
XX RESULT 1079
XX ADR77307
XX ID ADR77307 standard; DNA; 19 BP.
XX AC ADR77307;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1792.
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KW RNA interference; RNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX
XX WO2004080406-A2.
XX PN
XX XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX PA
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1792; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 10 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1373 GGCCCTGATCCCGAGCCC 1391
XX DB 1 GGCCCTGATCCCGAGCCC 19
XX
XX RESULT 1080
XX ADR77350
XX ID ADR77350 standard; DNA; 19 BP.
XX
XX AC ADR77350;
XX

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DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1835.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493866P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1835; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3525 GCCAGAGTGTGAGTCTCG 3543  
 Db |||||  
 1 GCCAGAGTGTGAGTCTCG 19  
 RESULT 1081  
 ADR77361  
 ID ADR77361 standard; DNA; 19 BP.  
 XX  
 AC ADR77361;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1846.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493866P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1846; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4302 AAGCGTACCTCTGTGGTTG 4320  
 Db 1 AAGCGTACCTCTGTGGTTG 19  
 |||||

RESULT 1082  
 ADR77391  
 ID ADR77391 standard; DNA; 19 BP.  
 XX  
 AC ADR77391;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1876.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454982P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1876; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3946 TCCGAGAAACCTCTCTT 3964  
 Db 1 TCCGAGAAACCTCTCTT 19  
 |||||

RESULT 1083  
 ADR77522  
 ID ADR77522 standard; DNA; 19 BP.  
 XX  
 AC ADR77522;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2007.  
 XX



antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytotatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX Db 1 AAAAAGCGATGCGCGGTC 19

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2007; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred.No. 6e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3965 AAAAAGCGATGCGCGGTC 3983

Db 1 AAAAAGCGATGCGCGGTC 19

## RESULT 1084

ADR77529

ID ADR77529 standard; DNA; 19 BP.

XX AC ADR77529;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2014.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0462894P.

XX PR 25-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0465802P.

XX PR 08-AUG-2003; 2003US-0469612P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2007; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instructions for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that



KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias; coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2544; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4852 ATGGGAAGTATAGAACTT 4870  
 |||||  
 Db 1 ATGGGAAGTATAGAACTT 19

RESULT 1087  
 ADR78162  
 ID ADR78162 standard; DNA; 19 BP.  
 XX  
 AC ADR78162;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2647.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2647; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 7 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 576 CCTACTTACATCCTGAACA 594  
 |||||  
 DB 1 CCTACTTACATCCTGAACA 19

RESULT 1088  
 AD78169  
 ID AD78169 standard; DNA; 19 BP.  
 XX AC AD78169;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2654.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2654; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1105 TGAAGACTCTCCAGGAAC 1123  
 |||||  
 DB 1 TGAAGACTCTCCAGGAAC 19

RESULT 1089  
 AD78238  
 ID AD78238 standard; DNA; 19 BP.  
 XX AC AD78238;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2723.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WC2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2723; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2448 AGAGCTACCTCCGCATCT 2466  
 |||||  
 Db 1 AGAGCTACCTCCGCATCT 19  
 RESULT 1090  
 ADR78241  
 ID ADR78241 standard; DNA; 19 BP.  
 XX AC ADR78241;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2726.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WC2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2726; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3514 TGAAGCAGAGCCAGAG 3532  
 Db |||||  
 1 TGAAGCAGAGCCAGAG 19

RESULT 1091  
 ADR78244  
 ID ADR78244 standard; DNA; 19 BP.  
 XX  
 AC ADR78244;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2729.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease. comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 2729; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 2 A; 11 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4755 TCCTCACCCTCCACCTCTG 4773  
 Db |||||  
 1 TCCTCACCCTCCACCTCTG 19

RESULT 1092  
 ADR78314  
 ID ADR78314 standard; DNA; 19 BP.  
 XX  
 AC ADR78314;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2799.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2799; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2559 CAGATGATTGGAGAGGTCA 2577  
 DB 1 CAGATGATTGGAGAGGTCA 19

RESULT 1093  
 ADR78341  
 ID ADR78341 standard; DNA; 19 BP.  
 XX AC ADR78341;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2826.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2826; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4135 AAGTCCCTACTTTTACCAT 4153  
 Db 1 AAGTCCCTACTTTTACCAT 19  
 |||||

RESULT 1094  
 ADR78355  
 ID ADR78355 standard; DNA; 19 BP.  
 XX  
 AC ADR78355;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2840.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0456655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2840; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4975 CTGGATCACTAAATTCCTCA 4993  
 Db 1 CTGGATCACTAAATTCCTCA 19  
 |||||

RESULT 1095  
 ADR78499  
 ID ADR78499 standard; DNA; 19 BP.  
 XX  
 AC ADR78499;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2984.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-MAY-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2984; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 34 TCTCGGTTGCTGCCGCTGA 52
DB 1 TCTCGGTTGCTGCCGCTGA 19
|||||
RESULT 1096
ADR78513
ID ADR78513 standard; DNA; 19 BP.

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XX ADR78513;
AC
XX 16-DEC-2004 (first entry)
DT
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2998.
DE
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
PN
XX
XX 23-SEP-2004.
PD
XX
XX 08-MAR-2004; 2004WO-US007070.
PF
XX
XX 07-MAR-2003; 2003US-0452682P.
PR
XX 12-MAR-2003; 2003US-0454265P.
PR
XX 13-MAR-2003; 2003US-0454962P.
PR
XX 13-MAR-2003; 2003US-0455050P.
PR
XX 14-APR-2003; 2003US-0462894P.
PR
XX 17-APR-2003; 2003US-0463772P.
PR
XX 25-APR-2003; 2003US-0465665P.
PR
XX 25-APR-2003; 2003US-0465802P.
PR
XX 09-MAY-2003; 2003US-0469812P.
PR
XX 08-AUG-2003; 2003US-0493986P.
PR
XX 11-AUG-2003; 2003US-0494597P.
PR
XX 26-SEP-2003; 2003US-0506341P.
PR
XX 09-OCT-2003; 2003US-0510246P.
PR
XX 10-OCT-2003; 2003US-0510318P.
PR
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2998; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 34 TCTCGGTTGCTGCCGCTGA 52
DB 1 TCTCGGTTGCTGCCGCTGA 19
|||||
RESULT 1096
ADR78513
ID ADR78513 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 593 CATCAAGAGGGGCATCATT 611  
 Db 1 CATCAAGAGGGGCATCATT 19

RESULT 1097  
 ADR78529  
 ID ADR78529 standard; DNA; 19 BP.  
 AC ADR78529;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3014.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3014; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 830 CTTGTCAACTCTGATCAGC 848  
 Db 1 CTTGTCAACTCTGATCAGC 19

RESULT 1098  
 ADR78535  
 ID ADR78535 standard; DNA; 19 BP.  
 XX  
 AC ADR78535;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3020.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

```

PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3020; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1008 ATCAACAGCCGCTTTTG 1026
Db 1 ATCAACAGCCGCTTTTG 19
|||||
|||||
RESULT 1099
ADR78538
ID ADR78538 standard; DNA; 19 BP.
XX
AC ADR78538;
XX
DT 16-DEC-2004 (first entry)

```

```

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3023.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0494597P.
XX 11-AUG-2003; 2003US-0506341P.
XX 26-SEP-2003; 2003US-0510246P.
XX 09-OCT-2003; 2003US-0510318P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3023; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1008 ATCAACAGCCGCTTTTG 1026
Db 1 ATCAACAGCCGCTTTTG 19
|||||
|||||
RESULT 1099
ADR78538
ID ADR78538 standard; DNA; 19 BP.
XX
AC ADR78538;
XX
DT 16-DEC-2004 (first entry)

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 TGTGTTGAAGACTCTCCAG 1118  
 |||||  
 Db 1 TGTGTTGAAGACTCTCCAG 19

RESULT 1100  
 ADR78541  
 ID ADR78541 standard; DNA; 19 BP.  
 XX  
 AC ADR78541;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3026.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3026; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1122 CTGAAAAAACTAACCATCT 1140  
 |||||  
 Db 1 CTGAAAAAACTAACCATCT 19

RESULT 1101  
 ADR78545  
 ID ADR78545 standard; DNA; 19 BP.  
 XX  
 AC ADR78545;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3030.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3026; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465665P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3030; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1184 TACTGAGCTGAGAGCCTC 1202
XX |||||
XX Db 1 TACTGAGCTGAGAGCCTC 19
XX
XX RESULT 1102
XX ADR78566
XX ID ADR78566 standard; DNA; 19 BP.
XX AC
XX AC ADR78566;
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3051.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX

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KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3051; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX

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XX
SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1754 GGTTCCTCTTCAGACTTTC 1772
DB 1 GGTTCCTCTTCAGACTTTC 19

RESULT 1103
AD78589
ID ADR78589 standard; DNA; 19 BP.
AC ADR78589;
XX
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3074.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3074; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

```

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2127 CTTCTTAAGAAAGCATGC 2145  
DB 1 CTTCTTAAGAAAGCATGC 19

RESULT 1104  
AD78640  
ID ADR78640 standard; DNA; 19 BP.  
XX  
XX ADR78640;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3125.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3074; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3125; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 4 C; 5 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3513 TTGCAAGCAGAGCCAGAA 3531  
 Db 1 TTGCAAGCAGAGCCAGAA 19  
 RESULT 1105  
 ADR78650  
 ID ADR78650 standard; DNA; 19 BP.  
 XX  
 XX ADR78650;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3135.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3135; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3513 TTGCAAGCAGAGCCAGAA 3531  
 Db 1 TTGCAAGCAGAGCCAGAA 19  
 RESULT 1105  
 ADR78650  
 ID ADR78650 standard; DNA; 19 BP.  
 XX  
 XX ADR78650;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3135.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3654 TTTGAATGGAACACAGCA 3672  
Db 1 TTTGAATGGAACACAGCA 19

RESULT 1106  
ADR78668  
ID ADR78668 standard; DNA; 19 BP.  
XX  
AC ADR78668;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3153.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN W02004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-MAR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0462894P.  
PR 25-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 08-MAY-2003; 2003US-0469612P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3153; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4143 ACTTTTACCATTCCCAAGT 4161

Db 1 ACTTTTACCATTCCCAAGT 19

RESULT 1107

ADR78686

ID ADR78686 standard; DNA; 19 BP.

XX

AC ADR78686;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3171.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN W02004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-MAR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 08-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3171; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4919 GCTGGTTCTGTAATATCAG 4937
Db 1 GCTGGTTCTGTAATATCAG 19
RESULT 1108
ADR78867
ID ADR78867 standard; DNA; 19 BP.
XX
AC ADR78867;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3352.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cystostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0456656P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3352; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 34 TCTCGTTCCTGCCGCTGA 52

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Db      1 TCTCGGTTGTCGCGCTGA 19
|||||
RESULT 1109
ADR78875
ID      ADR78875 standard; DNA; 19 BP.
XX
AC      ADR78875;
XX
DT      16-DEC-2004 (first entry)
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3360.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 3360; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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CC      is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC      the subject is suffering from a disorder characterised by elevated or
CC      otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC      levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC      disorder is chosen from the HDL/LDL cholesterol imbalance,
CC      dyslipidaemias, hypercholesterolaemia, statin-resistant
CC      hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC      disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC      inhibit hepatic glucose production or for treating glucose-metabolism-
CC      related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC      treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC      lung cancer), neurological disease (e.g., Huntington disease or
CC      spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC      represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC      can be used to control ApoB gene expression.
XX
SQ      Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      875 GGACGCTAAGAGGAGCAT 893
      |||||
DB      1 GGACGCTAAGAGGAGCAT 19
      |||||
RESULT 1110
ADR78886
ID      ADR78886 standard; DNA; 19 BP.
XX
AC      ADR78886;
XX
DT      16-DEC-2004 (first entry)
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3371.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 3360; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3371; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1951 TCACAGATCTGAAAAGTT 1969
DB 1 TCACAGATCTGAAAAGTT 19
RESULT 1111
ADR7889
ID ADR7889 standard; DNA; 19 BP.
XX
AC ADR7889;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3374.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX Homo sapiens.
OS
XX
XX W02004080406-A2.

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XX
PD
XX 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3374; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2231 GGAAGCTCTTTTGGGAAG 2249
DB 1 GGAAGCTCTTTTGGGAAG 19

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RESULT 1112  
 ADR78896  
 ID ADR78896 standard; DNA; 19 BP.  
 AC ADR78896;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3381.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PF Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3381; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 3262 CTGAGGCTACCATGACATT 3280  
 DB 1 CTGAGGCTACCATGACATT 19  
 XX  
 RESULT 1113  
 ADR78921  
 ID ADR78921 standard; DNA; 19 BP.  
 AC ADR78921;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3406.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PF Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3381; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3406; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g. Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 51 GAGGAGCCGCCGCGCCAG 69

Db 1 GAGGAGCCGCCGCGCCAG 19

RESULT 1114

ADR78922

ID ADR78922 standard; DNA; 19 BP.

XX AC ADR78922;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3407.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX XX

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3407; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g. Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 2 A; 7 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 73 GGGCGCGAGCGCGAGGCC 91

Db 1 GGGCGCGAGCGCGAGGCC 19

RESULT 1115

ADR78929

ID ADR78929 standard; DNA; 19 BP.

XX XX

AC ADR78929;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3414.

XX

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 23-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3414; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 326 GACTGCTGATTCAAGAAGT 344

Db 1 GACTGCTGATTCAAGAAGT 19

RESULT 1116

ADR78954

ID ADR78954 standard; DNA; 19 BP.

XX

AC ADR78954;

XX

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3439.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 23-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3414; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 3439; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control apob gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 592 ACATCAAGAGGGGCATCAT 610
DB 1 ACATCAAGAGGGGCATCAT 19
RESULT 1117
ADR78959
ID ADR78959 standard; DNA; 19 BP.
XX
AC ADR78959;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3444.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
FN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3444; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control apob gene expression.
XX
SQ Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 673 TGTATGGAACGTCTCCAC 691
DB 1 TGTATGGAACGTCTCCAC 19
RESULT 1118
ADR78969
ID ADR78969 standard; DNA; 19 BP.
XX
AC ADR78969;
XX
DT 16-DEC-2004 (first entry)
XX

```

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3454.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3454; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 8 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 787 CAGGCATCAGCCCACTTGC 805  
 Db 1 CAGGCATCAGCCCACTTGC 19  
 RESULT 1119  
 ADR78974  
 ID ADR78974 standard; DNA; 19 BP.  
 XX  
 AC ADR78974;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3459.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3459; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 912 AAGGAGCAACACCTCTTCC 930  
 Db ||||| ||||| ||||| |||||  
 1 AAGGAGCAACACCTCTTCC 19  
 RESULT 1120  
 ADR78986  
 ID ADR78986 standard; DNA; 19 BP.  
 XX  
 AC ADR78986;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3471.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-042894P.  
 PR 17-APR-2003; 2003US-0453772P.  
 PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0489612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 3471; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1034 TACTAAGAGATGGGCTC 1052  
 Db ||||| ||||| ||||| |||||  
 1 TACTAAGAGATGGGCTC 19  
 RESULT 1121  
 ADR79001  
 ID ADR79001 standard; DNA; 19 BP.  
 XX  
 AC ADR79001;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3486.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX PD 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US0007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX PA (ALNY-) ALNYLAM PHARM.  
XX  
XX PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 3486; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1277 TCAGTGTGGACAGCCTCAG 1295  
Db 1 TCAGTGTGGACAGCCTCAG 19  
RESULT 1122  
ADR79012  
ID ADR79012 standard; DNA; 19 BP.  
XX  
XX AC ADR79012;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3497.  
XX  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO2004080406-A2.  
XX  
XX PD 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US0007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX PA (ALNY-) ALNYLAM PHARM.  
XX  
XX PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 3497; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1592 TCTGGGGTTCATTGGAAAT 1610  
 Db 1 TCTGGGGTTCATTGGAAAT 19  
 RESULT 1123  
 ADR79032  
 ID ADR79032 standard; DNA; 19 BP.  
 XX  
 AC ADR79032;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3517.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 Example 5; SEQ ID NO 3517; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1852 ACAAAATTGTCCAAATTCCT 1870  
 Db 1 ACAAAATTGTCCAAATTCCT 19  
 RESULT 1124  
 ADR79036  
 ID ADR79036 standard; DNA; 19 BP.  
 XX  
 AC ADR79036;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3521.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3521; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1902 TTGTGGCTTCCCATATTG 1920  
 |||||  
 Db 1 TTGTGGCTTCCCATATTG 19  
 |||||  
 RESULT 1125  
 ADR79062  
 ID ADR79062 standard; DNA; 19 BP.  
 XX  
 AC ADR79062;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3547.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3547; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2236 CTTCTTTTGGGAGCAAGG 2254  
 Db 1 CTTCTTTTGGGAGCAAGG 19

## RESULT 1126

ADR79082

ID ADR79082 standard; DNA; 19 BP.

XX ADR79082;

AC ADR79082;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3567.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-045802P.

XX 09-MAY-2003; 2003US-0459612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3567; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 2 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2465 CTTGGGAGAGGAGCTTGGT 2483

Db 1 CTTGGGAGAGGAGCTTGGT 19

## RESULT 1127

ADR79088

ID ADR79088 standard; DNA; 19 BP.

XX ADR79088;

AC ADR79088;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3573.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3573; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2571 GAGTTCATCAGGAGGCT 2589  
 |||||||||||||||||

Db 1 GAGTTCATCAGGAGGCT 19  
 RESULT 1128  
 ADR79105  
 ID ADR79105 standard; DNA; 19 BP.  
 XX ADR79105;  
 AC ADR79105;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3590.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-Hiv;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3573; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2571 GAGTTCATCAGGAGGCT 2589  
 |||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2879 AAAAGCTGGGAAGCTGAAG 2897  
 Db 1 AAAAGCTGGGAAGCTGAAG 19

RESULT 1129  
 ADR79134  
 ID ADR79134 standard; DNA; 19 BP.  
 AC ADR79134;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3619.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 3619; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 11 A; 2 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3464 TGACACAAAGGAGAAAGA 3482  
 Db 1 TGACACAAAGGAGAAAGA 19

RESULT 1130  
 ADR79181  
 ID ADR79181 standard; DNA; 19 BP.  
 XX  
 AC ADR79181;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3666.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 CC sequence and antisense sequence which has specific modifications.  
 CC Example 5; SEQ ID NO 3666; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 8 A; 4 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4362 TATGACCACAGATACCT 4380  
 Db 1 TATGACCACAGATACCT 19  
 RESULT 1131

ADR79187  
 ID ADR79187 standard; DNA; 19 BP.  
 XX ADR79187;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3672.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 CC sequence and antisense sequence which has specific modifications.  
 CC Example 5; SEQ ID NO 3666; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4466 CCCAGTCTCAAAAGGTTTA 4484

DB 1 CCCAGTCTCAAAAGGTTTA 19

RESULT 1132

ADR79192

ID ADR79192 standard; DNA; 19 BP.

XX AC ADR79192;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3677.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0493612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PF Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3677; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4561 ATTGTGTTGTCAAAGAGT 4579

DB 1 ATTGTGTTGTCAAAGAGT 19

RESULT 1133

ADR79201

ID ADR79201 standard; DNA; 19 BP.

XX AC ADR79201;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3686.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454285P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3686; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4740 GAAGATGGACCCCTCTCCC 4758
Db 1 GAAGATGGACCCCTCTCCC 19
|||||
RESULT 1134
AD79206
ID AD79206 standard; DNA; 19 BP.
XX
AC AD79206;

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XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3691.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3691; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 Matches 19; Conservative 0; Indels 0; Gaps 0;

QY 4878 TCTAACCAAGATGGATATGA 4896  
 DB 1 TCTAACCAAGATGGATATGA 19

RESULT 1135

ID ADR79493

AD ADR79493 standard; DNA; 19 BP.

AC ADR79493;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3985.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 29-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3985; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2477 GCTTGTTTGGCCAGTCTC 2495

DB 1 GCTTGTTTGGCCAGTCTC 19

RESULT 1136

ID ADR79586

AD ADR79586 standard; DNA; 19 BP.

AC ADR79586;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4078.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4078; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 0 G; 11 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2602 TTTTCTTCTACTACATCTT 2620  
 Db 1 TTTTCTTCTACTACATCTT 19  
 RESULT 1137  
 ADR79636  
 ID ADR79636 standard; DNA; 19 BP.  
 XX  
 AC ADR79636;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4130.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4130; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2476 AGCTTGTTTGGCAGTCT 2494

Db 1 AGCTTGTTTGGCAGTCT 19

RESULT 1138

ADR79716

ID ADR79716 standard; DNA; 19 BP.

AC ADR79716;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4210.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0452682P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4210; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1678 CAAGCCATCCTCATGATGAT 1696

Db 1 CAAGCCATCCTCATGATGAT 19

RESULT 1139

ADR79835

ID ADR79835 standard; DNA; 19 BP.

AC ADR79835;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4329.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 4329; 378pp; English.  
XX  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 0.18; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 4746 GGACCTCTCCCTCACT 4764  
XX |||||  
XX Db 1 GGACCTCTCCCTCACT 19  
XX  
XX RESULT 1140  
XX AD79957  
XX ID AD79957 standard; DNA; 19 BP.  
XX  
XX AC AD79957;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4453.  
XX  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; RNA; antisense technology; lipid metabolism;  
XX

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 09-MAY-2003; 2003US-0465802P.  
XX 08-AUG-2003; 2003US-0469612P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 4453; 378pp; English.  
XX  
XX The invention describes a RNA interference (RNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3827 AATGAGCTCATGGCTTCAG 3845
   |||||
Dd 1 AATGAGCTCATGGCTTCAG 19

RESULT 1141
ADR80021
ID ADR80021 standard; DNA; 19 BP.
XX
AC ADR80021;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4517.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4517; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

```

stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4743 GATGGAAACCTCTCCCTCA 4761  
|||||

Dd 1 GATGGAAACCTCTCCCTCA 19

RESULT 1142  
ADR80351  
ID ADR80351 standard; DNA; 19 BP.  
XX  
AC ADR80351;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4848.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.

WO2004080406-A2.  
23-SEP-2004.  
08-MAR-2004; 2004WO-US007070.  
07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454265P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 4517; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I);

PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4848; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4552 AGAAACAGCATTGTTTGT 4570  
 Db 1 AGAAACAGCATTGTTTGT 19  
 RESULT 1143  
 ADR80414  
 ID ADR80414 standard; DNA; 19 BP.  
 XX  
 AC ADR80414;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4911.  
 XX  
 KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 4911; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.  
 Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



```

QY      3548  CTGGTGCCTGCCAAACTG 3566
Db      1  CTGGTGCCTGCCAAACTG 19

RESULT 1144
ADR80415
ID  ADR80415 standard; DNA; 19 BP.
AC  ADR80415;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 4912.
XX
KW  antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
PA  (ALNY-) ALNYLAM PHARM.
XX
PI  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
DR  Interference RNA agent useful for treating dyslipidemias, coronary artery
XX  disease, diabetes, cancer or neurological disease, comprises sense
XX  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 4912; 378pp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
XX  sense sequence and an antisense sequence, where the sense sequences have
XX  one or more asymmetrical 2'-O alkyl modifications, the antisense
XX  sequences have one or more asymmetrical phosphorothioate modifications
XX  and the antisense sequence targets a human gene sequence. Also described
XX  are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX  levels or glucose-6-phosphatase levels in a subject; producing (I);
XX  stabilising (I), involves selecting a sequence with activity and
XX  introducing one or more asymmetrical modification in the sequence, where
XX  the modification decreases nuclease sensitivity while not decreasing its
XX  activity; a kit comprising (I) and instruction for its use; and a device

```

that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e-02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2682 GGAGTCATTGCTCCCGAG 2700  
 |||||  
 Db 1 GGAGTCATTGCTCCCGAG 19

RESULT 1145  
 ADR80769  
 ID ADR80769 standard; DNA; 19 BP.  
 AC ADR80769;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5268.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4912; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device

PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 5268; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3028 AGCAAGTCCTTCTGGCCT 3046  
 DB 1 AGCAAGTCCTTCTGGCCT 19  
 RESULT 1146  
 AD75577  
 ID AD75577 standard; DNA; 19 BP.  
 XX  
 AC AD75577;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 62.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 62; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3028 AGCAAGTCCTTCTGGCCT 3046  
 DB 1 AGCAAGTCCTTCTGGCCT 19  
 RESULT 1146  
 AD75577  
 ID AD75577 standard; DNA; 19 BP.  
 XX  
 AC AD75577;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 62.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3636 GATCAGAGAGAGATTGAAT 3654  
 DB 1 GATCAGAGAGAGATTGAAT 19

RESULT 1147  
 ADP75615  
 ID ADP75615 standard; DNA; 19 BP.  
 AC  
 AC ADP75615;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 100.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 100; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SEQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1100 TGTGTTGAAGACTCTCCAG 1118

DB 1 TGTGTTGAAGACTCTCCAG 19

RESULT 1148

ADP75622

ID ADP75622 standard; DNA; 19 BP.

AC

AC ADP75622;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 107.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX PI

XX

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DR  WPI; 2004-677362/66.
XX
PT  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 107; 378pp; English.
XX
CC  The invention describes a RNA interference (RNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC  levels or glucose-6-phosphate levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity, a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
SQ  Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY  3315 GAAGTCCAAATTCGGATT 3333
Db  |||||
    1 GAAGTCCAAATTCGGATT 19

RESULT 1149
AD75635
ID  AD75635 standard; DNA; 19 BP.
XX
AC  AD75635;
XX
XX  16-DEC-2004 (first entry)
DT
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 120.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;
KW  RNA interference; RNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  W02004080406-A2.
XX
PD  23-SEP-2004.

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 120; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity, a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 0 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 27 GTGCCCTTCTCGTTGCTG 45
Db  ; |||||
    1 GTGCCCTTCTCGTTGCTG 19

RESULT 1150
AD75667

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ID ADR75667 standard; DNA; 19 BP.  
 AC ADR75667;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 152.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 152; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O allyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 10 C; 1 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1298 CTCACCTCACATCTCCAG 1316  
 |||||  
 DB 1 CTCACCTCACATCTCCAG 19

## RESULT 1151

ADR75668

ID ADR75668 standard; DNA; 19 BP.

XX

AC ADR75668;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 153.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX

XX 12-MAR-2003; 2003US-0454265P.

XX

XX 13-MAR-2003; 2003US-0454962P.

XX

XX 13-MAR-2003; 2003US-0455050P.

XX

XX 14-APR-2003; 2003US-0462894P.

XX

XX 17-APR-2003; 2003US-0463772P.

XX

XX 25-APR-2003; 2003US-0465665P.

XX

XX 25-APR-2003; 2003US-0465802P.

XX

XX 09-MAY-2003; 2003US-0469612P.

XX

XX 08-AUG-2003; 2003US-0493986P.

XX

XX 11-AUG-2003; 2003US-0494597P.

XX

XX 26-SEP-2003; 2003US-0506341P.

XX

XX 09-OCT-2003; 2003US-0510246P.

XX

XX 10-OCT-2003; 2003US-0510318P.

XX

XX 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 153; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1332 CATGCCAACCCCTTCGA 1350
DB 1 CATGCCAACCCCTTCGA 19
|||||
RESULT 1152
AD75684
ID AD75684 standard; DNA; 19 BP.
XX
AC AD75684;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 169.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; RNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.-
XX
XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-045426SP.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 169; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2151 ACTACCTCACTGCCTTTG 2169
DB 1 ACTACCTCACTGCCTTTG 19
|||||
RESULT 1153
AD75694
ID AD75694 standard; DNA; 19 BP.
XX
XX AD75694;
XX
XX

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DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 179.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 179; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2420 TTTCAATCCAAAGAGTC 2438

Db 1 TTTCAATCCAAAGAGTC 19

RESULT 1154

ADR75719

ID ADR75719 standard; DNA; 19 BP.

XX

AC ADR75719;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 204.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 204; 378pp; English.

XX

CC The invention describes a RNA interference (irna) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3957 CTCTTCTTAAAGCGATG 3975  
 Db 1 CTCTTCTTAAAGCGATG 19

RESULT 1155  
 ADR75720  
 ID ADR75720 standard; DNA; 19 BP.  
 XX  
 AC ADR75720;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 205.  
 XX  
 KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; irna; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 205; 378pp; English.  
 PS  
 CC The invention describes a RNA interference (irna) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3966 AAAAGCGATGCGCGGTCA 3984  
 Db 1 AAAAGCGATGCGCGGTCA 19

RESULT 1156  
 ADR75736  
 ID ADR75736 standard; DNA; 19 BP.  
 XX  
 AC ADR75736;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 221.  
 XX



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 221; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 1 A; 6 C; 3 G; 9 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 4959 TTCTTCAGCCCTGCTTCTG 4977

Db 1 TTCTTCAGCCCTGCTTCTG 19

RESULT 1157

ADR75857

ID ADR75857 standard; DNA; 19 BP.

XX

AC ADR75857;

XX

16-DEC-2004 (first entry)

XX

Human apolipoprotein B (ApoB) oligonucleotide seqid 342.

DE

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW Glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX

WO2004080406-A2.

PN

XX

23-SEP-2004.

XX

08-MAR-2004; 2004WO-US007070.

PF

07-MAR-2003; 2003US-0452682P.

PR

12-MAR-2003; 2003US-0454265P.

PR

13-MAR-2003; 2003US-0454962P.

PR

13-MAR-2003; 2003US-0455050P.

PR

14-APR-2003; 2003US-0462894P.

PR

17-APR-2003; 2003US-0463772P.

PR

25-APR-2003; 2003US-0465665P.

PR

25-APR-2003; 2003US-0465802P.

PR

09-MAY-2003; 2003US-0469612P.

PR

08-AUG-2003; 2003US-0493986P.

PR

11-AUG-2003; 2003US-0494597P.

PR

26-SEP-2003; 2003US-0506341P.

PR

09-OCT-2003; 2003US-0510246P.

PR

10-OCT-2003; 2003US-0510318P.

PR

07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

PA

Manoharan M, Bumcrot D;

PI

WPI; 2004-677362/66.

DR

XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

Example 5; SEQ ID NO 342; 378pp; English.

XX

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1638 CCAGAACTCAAGTCTTCAA 1656  
 |||||  
 Db 1 CCAGAACTCAAGTCTTCAA 19

RESULT 1158  
 ADR75894  
 ID ADR75894 standard; DNA; 19 BP.  
 AC ADR75894;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 379.  
 XX  
 DE  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 379; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 553 TCCTTTACCGGAGAAAGA 571  
 |||||  
 Db 1 TCCTTTACCGGAGAAAGA 19

RESULT 1159  
 ADR75908  
 ID ADR75908 standard; DNA; 19 BP.  
 AC ADR75908;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 393.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.



CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	903 GCCATCTGCAAGGACAC 921	
DB		
	1 GCCATCTGCAAGGACAC 19	
RESULT 1161		
ADR75987		
ID	ADR75987 standard; DNA; 19 BP.	
XX		
AC	ADR75987;	
XX		
DT	16-DEC-2004 (first entry)	
XX		
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 472.	
XX		
KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	
PR	12-MAR-2003; 2003US-0454265P.	
PR	13-MAR-2003; 2003US-0454962P.	
PR	13-MAR-2003; 2003US-0455050P.	
PR	14-APR-2003; 2003US-0462894P.	
PR	17-APR-2003; 2003US-0463772P.	
PR	25-APR-2003; 2003US-0465665P.	
PR	25-APR-2003; 2003US-0465802P.	
PR	09-MAY-2003; 2003US-0469612P.	
PR	08-AUG-2003; 2003US-0493986P.	
PR	11-AUG-2003; 2003US-0494597P.	
PR	26-SEP-2003; 2003US-0506341P.	
PR	09-OCT-2003; 2003US-0510246P.	
PR	10-OCT-2003; 2003US-0510318P.	
PR	07-NOV-2003; 2003US-0518453P.	
XX		
PA	(ALNY-) ALNYLAM PHARM.	
XX		
PI	Manoharan M, Bumcrot D;	
XX		
DR	WPI; 2004-677362/66.	
XX		
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery	
PT	disease, diabetes, cancer or neurological disease, comprises sense	
PT	sequence and antisense sequence which has specific modifications.	
XX		
PS	Example 5; SEQ ID NO 472; 378pp; English.	
XX		
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a	
CC	sense sequence and an antisense sequence, where the sense sequences have	
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense	
CC	sequences have one or more asymmetrical phosphorothioate modifications	
CC	and the antisense sequence targets a human gene sequence. Also described	
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100	
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);	
CC	stabilising (I), involves selecting a sequence with activity and	
CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant	
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 4 A; 6 C; 1 G; 8 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	2606 TCTTCACTACATCTTCATG 2624	
DB		
	1 TCTTCACTACATCTTCATG 19	
RESULT 1162		
ADR76025		
ID	ADR76025 standard; DNA; 19 BP.	
XX		
AC	ADR76025;	
XX		
DT	16-DEC-2004 (first entry)	
XX		
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 510.	
XX		
KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 510; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e-02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3591 ACAGCTTATGGCTCCACAG 3609  
 ID ||||||||||||||||||||  
 Db 1 ACAGCTTATGGCTCCACAG 19  
 RESULT 1163  
 ADR76029  
 ID ADR76029 standard; DNA; 19 BP.  
 XX AC ADR76029;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 514.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 514; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e-02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 0 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3635 TGATGAGAGAGATTGAA 3653  
 DB 1 TGATGAGAGAGATTGAA 19  
 RESULT 1164  
 ADR76032  
 ID ADR76032 standard; DNA; 19 BP.  
 XX  
 AC ADR76032;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 517.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 517; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3654 TTGTAATGGAACACAGGCA 3672  
 DB 1 TTGTAATGGAACACAGGCA 19  
 RESULT 1165  
 ADR76068  
 ID ADR76068 standard; DNA; 19 BP.  
 XX  
 AC ADR76068;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 553.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 553; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4919 GCTGCGTCTCGAATATCAG 4937  
 DB 1 GCTGCGTCTCGAATATCAG 19

RESULT 1166  
 ADR76264  
 ID ADR76264 standard; DNA; 19 BP.  
 XX AC ADR76264;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 749.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA, antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 749; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.





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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0493986P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 763; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3262 CTGAGGCTACCATGACATT 3280
XX
XX DB 1 CTGAGGCTACCATGACATT 19
XX
XX RESULT 1169
XX ADR76309
XX ID ADR76309 standard; DNA; 19 BP.

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XX AC ADR76309;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 794.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 794; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3262 CTGAGGCTACCATGACATT 3280
XX
XX DB 1 CTGAGGCTACCATGACATT 19
XX
XX RESULT 1169
XX ADR76309
XX ID ADR76309 standard; DNA; 19 BP.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 03-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
PI
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 818; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

```

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Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 586 TCCTGAACATCAAGAGGGG 604

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Db 1 TCCTGAACATCAAGAGGGG 19

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RESULT 1172

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ADR76393

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ID ADR76393 standard; DNA; 19 BP.

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XX

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AC ADR76393;

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XX

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DT 16-DEC-2004 (first entry)

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XX Human apolipoprotein B (ApoB) oligonucleotide seqid 878.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0469612P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 878; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1585 ATTTGATTCGCGGTTCAT 1603  
 Db |||||  
 1 ATTTGATTCGCGGTTCAT 19

RESULT 1173  
 ADR76402  
 ID ADR76402 standard; DNA; 19 BP.  
 XX  
 AC ADR76402;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 887.

DE  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 887; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1695 ATCCAGAAAGCTGCCATCC 1713  
 Db |||||  
 1 ATCCAGAAAGCTGCCATCC 19

RESULT 1174  
 ADR76416  
 ID ADR76416 standard; DNA; 19 BP.  
 XX  
 AC ADR76416;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 901.

DE  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 887; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-046566SP.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 05-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 901; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1893 GTGAAGAACTTGTGGCTT 1911  
 Db 1 GTGAAGAACTTGTGGCTT 19  
 RESULT 1175  
 ADR76452  
 ID ADR76452 standard; DNA; 19 BP.  
 XX  
 AC ADR76452;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 937.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PA Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 937; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2380 TAAATGGAATAATGCTCAG 2398  
 |||||  
 DB 1 TAAATGGAATAATGCTCAG 19

RESULT 1176  
 AD76456  
 ID ADR76456 standard; DNA; 19 BP.  
 XX  
 AC ADR76456;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 941.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 26-SEP-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 941; 378pp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2397 AGTGTGAGAGCTGATTA 2415  
 |||||  
 DB 1 AGTGTGAGAGCTGATTA 19

RESULT 1177  
 AD76466  
 ID ADR76466 standard; DNA; 19 BP.  
 XX  
 AC ADR76466;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 951.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 26-SEP-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 941; 378pp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 951; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2479 TTGGTTTTCAGTCTCCA 2497
Db 1 TTGGTTTTCAGTCTCCA 19
XX
RESULT 1178
AD76467
ID ADR76467 standard; DNA; 19 BP.
XX
XX ADR76467;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 952.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

```

```

KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-04659612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 952; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;

```

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2489 CAGTCTCCATGACCTCCAG 2507  
 |||||  
 Db 1 CAGTCTCCATGACCTCCAG 19

RESULT 1179  
 ADR76475  
 ID ADR76475 standard; DNA; 19 BP.  
 XX  
 AC ADR76475;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 960.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 960; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2628 AATGCTTTGAACTCCCA 2646  
 |||||

Db 1 AATGCTTTGAACTCCCA 19

RESULT 1180

ADR76479

ID ADR76479 standard; DNA; 19 BP.

XX

AC ADR76479;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 964.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US0007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 964; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2720 GGAGTAGCCACATGCAG 2738
XX DQ 1 GGAGTAGCCACATGCAG 19
XX
XX RESULT 1181
XX ID ADR76546
XX ID ADR76546 standard; DNA; 19 BP.
XX AC ADR76546;
XX XX
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1031.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1031; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4947 GAGTCATTGAGGTTCTTCA 4965

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Db      1 GAGTCATTGAGGTCTTCA 19
|||||
RESULT 1182
ID      ADR76658 standard; DNA; 19 BP.
XX
AC      ADR76658;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 1143.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
XX      disease, diabetes, cancer or neurological disease, comprises sense
XX      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 1143; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 2544 CTGCAGGGGATCCCCAGA 2562  
Db 1 CTGCAGGGGATCCCCAGA 19

RESULT 1183  
ADR76692  
ID ADR76692 standard; DNA; 19 BP.  
XX  
AC ADR76692;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1177.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 1143; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1177; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2476 AGCTTGGTTTGGCCAGTCT 2494
Db 1 AGCTTGGTTTGGCCAGTCT 19
XX
RESULT 1184
AD76916
ID AD76916 standard; DNA; 19 BP.
XX
AC AD76916;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1401.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.

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XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454982P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0493986P.
XX 26-SEP-2003; 2003US-0494597P.
XX 09-OCT-2003; 2003US-0506341P.
XX 10-OCT-2003; 2003US-0510246P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1401; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3822 GTTGCATGAGCTCATGCC 3840
Db 1 GTTGCATGAGCTCATGCC 19
XX
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX

```

RESULT 1185  
 ADR777026  
 ID ADR777026 standard; DNA; 19 BP.  
 XX  
 AC ADR777026;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1511.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1511; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance, CC dyslipidaemias, hypercholesterolaemia, statin-resistant CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4577 AGTCAAGATTGATGGCAG 4595  
 Db 1 AGTCAAGATTGATGGCAG 19  
 RESULT 1186  
 ADR777373  
 ID ADR777373 standard; DNA; 19 BP.  
 XX  
 AC ADR777373;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1858.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1511; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1858; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I); involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g. Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4886 GATGGATATGACCTTCTCT 4904  
|||||  
DB 1 GATGGATATGACCTTCTCT 19

RESULT 1187  
ADR77416  
ID ADR77416 standard; DNA; 19 BP.

XX  
XX ADR77416;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1901.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscle; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
OS  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454285P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI MPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1901; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I); involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g. Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2770 TGGAGTTTGTGACAAATAT 2788  
|||||  
DB 1 TGGAGTTTGTGACAAATAT 19

RESULT 1188  
ADR77527  
ID ADR77527 standard; DNA; 19 BP.  
XX

AC ADR77527;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2012.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2012; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4008 TTGAAATTCAGATTCCTT 4026  
 Db 1 TTGAAATTCAGATTCCTT 19  
 RESULT 1189  
 ADR77557  
 ID ADR77557 standard; DNA; 19 BP.  
 XX  
 AC ADR77557;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2042.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

```

PS Example 5; SEQ ID NO 2042; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control apoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4561 ATTGTGTTGTCAAAGAAGT 4579
DB 1 ATTGTGTTGTCAAAGAAGT 19
RESULT 1190
ADR77560
ID ADR77560 standard; DNA; 19 BP.
AC ADR77560;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2045.
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2045; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control apoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4598 CAGAGTCCTCTGCTTCTAT 4616
DB 1 CAGAGTCCTCTGCTTCTAT 19
RESULT 1191
ADR77565
ID ADR77565 standard; DNA; 19 BP.
XX
AC ADR77565;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2050.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2050; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 9 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4702 CCTACCTCCCAAGGCACCAA 4720  
 Db 1 CCTACCTCCCAAGGCACCAA 19  
 RESULT 1192  
 ADR77571  
 ID ADR77571 standard; DNA; 19 BP.  
 XX  
 AC ADR77571;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2056.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2056; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4878 TCTACACAGATGGATATGA 4896  
 DB 1 TCTACACAGATGGATATGA 19  
 RESULT 1193  
 ADR78160  
 ID ADR77975 standard; DNA; 19 BP.  
 XX  
 AC ADR77975;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2460.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-046565P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0489612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 2460; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2087 CAAATAGAGGGAATCTTT 2105  
 DB 1 CAAATAGAGGGAATCTTT 19  
 RESULT 1194  
 ADR78160  
 ID ADR78160 standard; DNA; 19 BP.  
 XX  
 AC ADR78160;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2645.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2645; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 4 A; 3 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 300 GCTGAGAGTTCCAGTGGAG 318  
 Db 1 GCTGAGAGTTCCAGTGGAG 19  
 ADR78176  
 ID ADR78176 standard; DNA; 19 BP.  
 XX  
 AC ADR78176;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2661.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2645; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1521 GACATTGCTAATACCTGA 1539  
 DB 1 GACATTGCTAATACCTGA 19

## RESULT 1196

AD R78183  
 ID ADR78183 standard; DNA; 19 BP.  
 AC ADR78183;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2668.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0482894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manohatan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2668; 378pp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2399 TGTGAGAGCTGATTAAA 2417

DB 1 TGTGAGAGCTGATTAAA 19

## RESULT 1197

AD R78196  
 ID ADR78196 standard; DNA; 19 BP.

AC ADR78196;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2681.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2681; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 11 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3674 CAATGTAGATACCAAAAAA 3692  
 Db 1 CAATGTAGATACCAAAAAA 19  
 RESULT 1198  
 ADR78229  
 ID ADR78229 standard; DNA; 19 BP.  
 XX  
 AC ADR78229;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2714.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2714; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2384 TGGGAATAATGCTCAGTGTT 2402  
 Db 1 TGGGAATAATGCTCAGTGTT 19  
 RESULT 1199  
 ADR78259  
 ID ADR78259 standard; DNA; 19 BP.  
 XX  
 AC ADR78259;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2744.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485665P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 2744; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 314 TGGAGTCCCTGGGACTGCT 332  
 Db 1 TGGAGTCCCTGGGACTGCT 19  
 RESULT 1200  
 ADR78267  
 ID ADR78267 standard; DNA; 19 BP.  
 XX  
 AC ADR78267;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2752.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2752; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

Db 1 CTCGCGCTTCATCTCTGA 19  
 RESULT 1201  
 ADR78271  
 ID ADR78271 standard; DNA; 19 BP.  
 XX ADR78271;  
 AC ADR78271;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2756.  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2756.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2752; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 4 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 470 GAAACCAAGAACTCTGAG 488  
 Db 1 GAAACCAAGAACTCTGAG 19

## RESULT 1202

ADR78284

ID ADR78284 standard; DNA; 19 BP.

AC ADR78284;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2769.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0494597P.

XX 09-OCT-2003; 2003US-0506341P.

XX 10-OCT-2003; 2003US-0510246P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

XX

DR

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PT

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CC

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CC

CC

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CC

CC

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CC

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CC

CC

SQ

Sequence 19 BP; 5 A; 9 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1249 CCAGCCCCCATCTTACA 1267

Db 1 CCAGCCCCCATCTTACA 19

## RESULT 1203

ADR78287

ID ADR78287 standard; DNA; 19 BP.

AC ADR78287;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2772.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2772; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1408 GAGAGATCTTCAACATGGC 1426  
 |||||  
 Db 1 GAGAGATCTTCAACATGGC 19  
 RESULT 1204

ADR78302  
 ID ADR78302 standard; DNA; 19 BP.  
 XX ADR78302;  
 AC ADR78302;  
 XX 16-DEC-2004 (first entry)  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2787.  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2787.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2787; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2151 ACTACCTCACTGCCCTTG 2169  
 Db 1 ACTACCTCACTGCCCTTG 19  
 RESULT 1205  
 ADR78326  
 ID ADR78326 standard; DNA; 19 BP.  
 XX AC ADR78326;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2811.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 08-MAR-2004; 2004WO-US007070.  
 XX  
 07-MAR-2003; 2003US-0452682P.  
 PR  
 12-MAR-2003; 2003US-0454265P.  
 PR  
 13-MAR-2003; 2003US-0454962P.  
 PR  
 13-MAR-2003; 2003US-0455050P.  
 PR  
 14-APR-2003; 2003US-0462894P.  
 PR  
 17-APR-2003; 2003US-0463772P.  
 PR  
 25-APR-2003; 2003US-0465665P.  
 PR  
 25-APR-2003; 2003US-0465802P.  
 PR  
 08-AUG-2003; 2003US-0489612P.  
 PR  
 11-AUG-2003; 2003US-0493986P.  
 PR  
 26-SEP-2003; 2003US-0494597P.  
 PR  
 09-OCT-2003; 2003US-0506341P.  
 PR  
 10-OCT-2003; 2003US-0510246P.  
 PR  
 07-NOV-2003; 2003US-0518453P.  
 PR  
 (ALNY-) ALNYLAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 PI  
 WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2811; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3481 GAAAATCAAGGCTGTAT 3499  
 Db 1 GAAAATCAAGGCTGTAT 19  
 RESULT 1206  
 ADR78522  
 ID ADR78522 standard; DNA; 19 BP.  
 XX AC ADR78522;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3007.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3007; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 724 TGGCAACAGAAATATCCAC 742  
 Db 1 TGGCAACAGAAATATCCAC 19  
 RESULT 1207  
 ADR78526  
 ID ADR78526 standard; DNA; 19 BP.  
 XX  
 AC ADR78526;

16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3011.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3011; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 9 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

Qy 794 CAGCCCACTGCTCTCATC 812  
 Db 1 CAGCCCACTGCTCTCATC 19

RESULT 1208

ID ADR78551 standard; DNA; 19 BP.

XX ADR78551;

AC ADR78551;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3036.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3036; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1229 GCCACAGCTGATTGAGGTG 1247

Db 1 GCCACAGCTGATTGAGGTG 19

RESULT 1209

ID ADR78564

XX ADR78564 standard; DNA; 19 BP.

AC ADR78564;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3049.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 05-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3049; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1713 CAGGCTCTGCGGAATGG 1731
XX |||||
XX Db 1 CAGGCTCTGCGGAATGG 19
XX
XX RESULT 1210
XX ADR78577
XX ID ADR78577 standard; DNA; 19 BP.
XX
XX AC ADR78577;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3062.

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XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3062; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

```

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 SQ Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1948 ATATCCCAAGATCTGAAAAA 1966  
 |||||  
 Db 1 ATATCCCAAGATCTGAAAAA 19  
 RESULT 1211  
 ADR78578  
 ID ADR78578 standard; DNA; 19 BP.  
 XX  
 AC ADR78578;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3063.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3063; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1949 TATCCCAAGATCTGAAAAAG 1967  
 |||||  
 Db 1 TATCCCAAGATCTGAAAAAG 19  
 RESULT 1212  
 ADR78579  
 ID ADR78579 standard; DNA; 19 BP.  
 XX  
 AC ADR78579;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3064.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3063; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

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PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3064; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1953 CAAGATCTGAAAAGTTAG 1971
Db 1 CAAGATCTGAAAAGTTAG 19
RESULT 1213
ADR78597
ID ADR78597 standard; DNA; 19 BP.
XX
AC ADR78597;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3082.
XX
XX antiipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW

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KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3082; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;

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Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 2308 CTGATGGTGTCCTAAGGT 2326
DB 1 CTGATGGTGTCCTAAGGT 19

RESULT 1214
ID ADR78613 standard; DNA; 19 BP.
XX
AC ADR78613;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3098.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0485665P.
PR 25-APR-2003; 2003US-0485802P.
PR 09-MAY-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
DR Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3098; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or Glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or Glucose-6-phosphatase levels. (M1)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating Glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2646 ACTGGAGCTGGATTACAGT 2664
DB 1 ACTGGAGCTGGATTACAGT 19

RESULT 1215
ID ADR78621 standard; DNA; 19 BP.
XX
AC ADR78621;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3106.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0485665P.
PR 25-APR-2003; 2003US-0485802P.
PR 09-MAY-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
DR Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3098; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or Glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3106; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 1 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2829 ATGAACACCAACTTCTTCC 2847
Db |||||
1 ATGAACACCAACTTCTTCC 19

RESULT 1216
AD78622
ID AD78622 standard; DNA; 19 BP.
XX
AC AD78622;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3107.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3107; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2843 CTTCCACGACTCGGCTG 2861  
 Db 1 CTTCCACGACTCGGCTG 19

RESULT 1217  
 ADR78628  
 ID ADR78628 standard; DNA; 19 BP.  
 XX ADR78628;  
 AC ADR78628;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3113.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Buncrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3113; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3262 CTGAGGCTACCATGACATT 3280  
 Db 1 CTGAGGCTACCATGACATT 19

RESULT 1218  
 ADR78630  
 ID ADR78630 standard; DNA; 19 BP.  
 XX ADR78630;  
 AC ADR78630;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3115.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Buncrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3113; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

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PA (ALNY-) ALNYLAM PHARM.
PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3115; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 2 C; 4 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3323 AATCCGGATTTCATGTT 3341
DB 1 AATCCGGATTTCATGTT 19
RESULT 1219
AD78652
ID AD78652 standard; DNA; 19 BP.
XX
XX AD78652;
XX
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3137.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.

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XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 28-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 03-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3137; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 10 A; 4 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3686 CAAAAAATGACTTCCAAT 3704
DB 1 CAAAAAATGACTTCCAAT 19

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RESULT 1220  
 ADR78671  
 ID ADR78671 standard; DNA; 19 BP.  
 CC  
 AC  
 CC ADR78671;  
 CC  
 CC  
 DT 16-DEC-2004 (first entry)  
 CC  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3156.  
 CC  
 KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 CC  
 OS Homo sapiens.  
 CC  
 XX WO2004080406-A2.  
 CC  
 XX  
 CC 23-SEP-2004.  
 CC  
 XX  
 CC 08-MAR-2004; 2004WO-US0007070.  
 CC  
 XX  
 CC 07-MAR-2003; 2003US-0452682P.  
 CC 12-MAR-2003; 2003US-0454265P.  
 CC 13-MAR-2003; 2003US-0454962P.  
 CC 13-MAR-2003; 2003US-0455050P.  
 CC 14-APR-2003; 2003US-0462894P.  
 CC 17-APR-2003; 2003US-0463772P.  
 CC 25-APR-2003; 2003US-0465665P.  
 CC 25-APR-2003; 2003US-0465802P.  
 CC 09-MAY-2003; 2003US-0469612P.  
 CC 08-AUG-2003; 2003US-0493986P.  
 CC 11-AUG-2003; 2003US-0494597P.  
 CC 26-SEP-2003; 2003US-0506341P.  
 CC 09-OCT-2003; 2003US-0510246P.  
 CC 10-OCT-2003; 2003US-0510318P.  
 CC 07-NOV-2003; 2003US-0518453P.  
 CC  
 XX (ALNY-) ALNYLAM PHARM.  
 CC  
 XX  
 CC Manoharan M, Bumcrot D;  
 CC  
 XX WPI; 2004-677362/66.  
 CC  
 XX  
 CC Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 CC  
 PS Example 5; SEQ ID NO 3156; 378pp; English.  
 CC  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC

otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4327 TTCTCTCAATGTCGAAGG 4345  
 |||||  
 DB 1 TTCTCTCAATGTCGAAGG 19

RESULT 1221  
 ADR78678  
 ID ADR78678 standard; DNA; 19 BP.  
 CC  
 AC ADR78678;  
 CC  
 CC  
 DT 16-DEC-2004 (first entry)  
 CC  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3163.  
 CC  
 XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 CC  
 OS Homo sapiens.  
 CC  
 XX WO2004080406-A2.  
 CC  
 XX 23-SEP-2004.  
 CC  
 XX 08-MAR-2004; 2004WO-US0007070.  
 CC  
 XX 07-MAR-2003; 2003US-0452682P.  
 CC 12-MAR-2003; 2003US-0454265P.  
 CC 13-MAR-2003; 2003US-0454962P.  
 CC 13-MAR-2003; 2003US-0455050P.  
 CC 14-APR-2003; 2003US-0462894P.  
 CC 17-APR-2003; 2003US-0463772P.  
 CC 25-APR-2003; 2003US-0465665P.  
 CC 25-APR-2003; 2003US-0465802P.  
 CC 09-MAY-2003; 2003US-0469612P.  
 CC 08-AUG-2003; 2003US-0493986P.  
 CC 11-AUG-2003; 2003US-0494597P.  
 CC 26-SEP-2003; 2003US-0506341P.  
 CC 09-OCT-2003; 2003US-0510246P.  
 CC 10-OCT-2003; 2003US-0510318P.  
 CC 07-NOV-2003; 2003US-0518453P.  
 CC  
 XX (ALNY-) ALNYLAM PHARM.  
 CC  
 XX Manoharan M, Bumcrot D;  
 CC  
 XX WPI; 2004-677362/66.  
 CC  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 CC  
 PS Example 5; SEQ ID NO 3156; 378pp; English.  
 CC  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC

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DR  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 3163; 378pp; English.
XX
CC  The invention describes a RNA interference (RNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequence
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC  levels or glucose-6-phosphate levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
SQ  Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  4655 TAACACTGGCGGCTCAAT 4673
Db  1 TAACACTGGCGGCTCAAT 19
RESULT 1222
AD78679
ID  AD78679 standard; DNA; 19 BP.
XX
XX  AD78679;
AC  AD78679;
XX
XX  16-DEC-2004 (first entry)
DT
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 3164.
XX
XX  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW  RNA interference; RNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
XX  WO2004080406-A2.
PN
XX  23-SEP-2004.
PD

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XX  08-MAR-2004; 2004WO-US007070.
XX  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX  (ALNY-) ALNYLAM PHARM.
PA  Manoharan M, Bumcrot D;
XX  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 3164; 378pp; English.
XX
XX  The invention describes a RNA interference (RNA) agent (I) comprising a
XX  sense sequence and an antisense sequence, where the sense sequences have
XX  one or more asymmetrical 2'-O alkyl modifications, the antisense
XX  sequences have one or more asymmetrical phosphorothioate modifications
XX  and the antisense sequence targets a human gene sequence. Also described
XX  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX  levels or glucose-6-phosphate levels in a subject; producing (I);
XX  stabilising (I), involves selecting a sequence with activity and
XX  introducing one or more asymmetrical modification in the sequence, where
XX  the modification decreases nuclease sensitivity while not decreasing its
XX  activity; a kit comprising (I) and instruction for its use; and a device
XX  that can be dispense or administer a composition comprising (I). (I) is
XX  useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
XX  is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
XX  The subject is suffering from a disorder characterised by elevated or
XX  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX  levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX  disorder is chosen from the HDL/LDL cholesterol imbalance,
XX  dyslipidaemias, hypercholesterolaemia, statin-resistant
XX  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX  disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX  inhibit hepatic glucose production or for treating glucose-metabolism-
XX  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX  treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX  lung cancer), neurological disease (e.g., Huntington disease or
XX  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX  can be used to control ApoB gene expression.
XX
SQ  Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY  4656 AACACTGGCGGCTCAATG 4674
Db  1 AACACTGGCGGCTCAATG 19
RESULT 1223
ADR78901

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ID ADR78901 standard; DNA; 19 BP.  
 AC ADR78901;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3386.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-SEP-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3386; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4561 ATTTGTTTGTCAAGAAGT 4579  
 Db 1 ATTTGTTTGTCAAGAAGT 19  
 RESULT 1224  
 ADR78919  
 ID ADR78919 standard; DNA; 19 BP.  
 XX  
 AC ADR78919;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3404.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-SEP-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 3404; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 26 AGTGCCTTCCTCGGTTGCT 44
XX Db 1 AGTGCCTTCCTCGGTTGCT 19
XX
XX RESULT 1225
XX ADNR78953
XX ID ADNR78953 standard; DNA; 19 BP.
XX AC ADNR78953;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3438.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; RNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
12-MAR-2003; 2003US-0454265P.
13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
Manoharan M, Bumcrot D;
WPI; 2004-677362/66.
Interference RNA agent useful for treating dyslipidemias, coronary artery
disease, diabetes, cancer or neurological disease, comprises sense
sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 3438; 378pp; English.
The invention describes a RNA interference (RNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
Sequence 19 BP; 8 A; 4 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 591 AACATCAAGAGGGGCATCA 609
Db 1 AACATCAAGAGGGGCATCA 19
RESULT 1226
ADNR78963
ID ADNR78963 standard; DNA; 19 BP.
XX ADNR78963;
XX
XX

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16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3448.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; RNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3448; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 CC Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 697 TTACCGTCAACGACGAGGAA 715  
 |||||  
 Db 1 TTACCGTCAACGACGAGGAA 19  
 RESULT 1227  
 ADR78966  
 ID ADR78966 standard; DNA; 19 BP.  
 XX  
 AC ADR78966;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3451.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 3451; 378pp; English.  
 XX  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (siRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 2 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 710 GAGGAGGGCAATGTGCA 728  
 Db | | | | | | | | | | | | | | | | | | | | | |  
 1 GAGGAGGGCAATGTGCA 19

RESULT 1228  
 ADR78985  
 ID ADR78985 standard; DNA; 19 BP.  
 AC ADR78985;  
 XX  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 DX Human apolipoprotein B (ApoB) oligonucleotide seqid 3470.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; siRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3470; 378pp; English.  
 CC The invention describes a RNA interference (siRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1022 CTTTGGTGAAGGTACTAAG 1040  
 Db | | | | | | | | | | | | | | | | | | | | | |  
 1 CTTTGGTGAAGGTACTAAG 19

RESULT 1229  
 ADR79010  
 ID ADR79010 standard; DNA; 19 BP.  
 AC ADR79010;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 DX Human apolipoprotein B (ApoB) oligonucleotide seqid 3495.  
 DE  
 XX



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX

PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 3495; 378pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence has  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
 XX

Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX

QY 1575 GATTACACCTATTGGATTTC 1593  
 |||||  
 Db 1 GATTACACCTATTGGATTTC 19  
 XX

RESULT 1230  
 ADR79023  
 ID ADR79023 standard; DNA; 19 BP.  
 XX

AC ADR79023;  
 XX

DT 16-DEC-2004 (first entry)  
 XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3508.  
 XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX

PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 3508; 378pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence has  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications



KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3522; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1906 TGGCTTCCCATATTGCCAA 1924  
 Db 1 TGGCTTCCCATATTGCCAA 19  
 RESULT 1233  
 ADR79086  
 ID ADR79086 standard; DNA; 19 BP.  
 XX AC ADR79086;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3571.  
 DE KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3571; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2493 CTCATGACCTCCAGCTCC 2511  
Db 1 CTCATGACCTCCAGCTCC 19  
RESULT 1234  
ADR79116  
ID ADR79116 standard; DNA; 19 BP.  
XX  
AC ADR79116;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3601.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
PS Example 5; SEQ ID NO 3601; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3111 CTGACCGGGGACACCCAGAT 3129  
Db 1 CTGACCGGGGACACCCAGAT 19  
RESULT 1235  
ADR79152  
ID ADR79152 standard; DNA; 19 BP.  
XX  
AC ADR79152;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3637.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3637; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3819 ATAGTTGCAATGAGTCTCAT 3837  
 |||||  
 Db 1 ATAGTTGCAATGAGTCTCAT 19  
 RESULT 1236  
 ADR79179  
 ID ADR79179 standard; DNA; 19 BP.  
 XX AC ADR79179;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3664.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3664; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4323 CTGCTTTCTCAATGTGC 4341  
 Db 1 CTGCTTTCTCAATGTGC 19  
 RESULT 1237  
 ADR79490  
 ID ADR79490 standard; DNA; 19 BP.  
 XX  
 AC ADR79490;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3982.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465912P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3982; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4947 GAGTCATTGAGGTTCTTCA 4965  
 Db 1 GAGTCATTGAGGTTCTTCA 19  
 RESULT 1238  
 ADR79584  
 ID ADR79584 standard; DNA; 19 BP.  
 XX  
 AC ADR79584;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4076.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4076; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3242 AGCAGAGGTGCGAGCAG 3260  
 Db 1 AGCAGAGGTGCGAGCAG 19

RESULT 1239  
 ADR79670  
 ID ADR79670 standard; DNA; 19 BP.  
 XX AC ADR79670;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4164.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4164; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3242 AGCAGAGGTGCGAGCAG 3260  
 Db 1 AGCAGAGGTGCGAGCAG 19

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4852 ATGGGAAGTATAGAACTT 4870  
 |||||  
 Db 1 ATGGGAAGTATAGAACTT 19

RESULT 1240  
 ADR79789  
 ID ADR79789 standard; DNA; 19 BP.  
 AC ADR79789;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4283.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4283; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3023 TTGCAAGCAAGTCTTTCCT 3041  
 |||||  
 Db 1 TTGCAAGCAAGTCTTTCCT 19

RESULT 1241  
 ADR79832  
 ID ADR79832 standard; DNA; 19 BP.  
 AC ADR79832;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4326.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4326; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 398 CATCTGAGACCGCCAG 416
XX |||||
XX Db 1 CATCTGAGACCGCCAG 19
XX
XX RESULT 1242
XX ADR79871
XX ID ADR79871 standard; DNA; 19 BP.

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XX
XX ADR79871;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4367.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4367; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 398 CATCTGAGACCGCCAG 416
XX |||||
XX Db 1 CATCTGAGACCGCCAG 19
XX
XX RESULT 1242
XX ADR79871
XX ID ADR79871 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 2588 CTCAAGAATGACCTTTT 2606  
 Db 1 CTCAGAATGACCTTTT 19

RESULT 1243  
 ADR80260  
 ID ADR80260 standard; DNA; 19 BP.  
 XX  
 AC ADR80260;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4757.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 4757; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 4758 CTCACCTCCACCTCTGATC 4776  
 Db 1 CTCACCTCCACCTCTGATC 19

RESULT 1244  
 ADR80267  
 ID ADR80267 standard; DNA; 19 BP.  
 XX  
 AC ADR80267;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4764.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

```

PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4764; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3543 GCCACTGGTGCCTGCCA 3561
XX |||||
XX Db 1 GCCACTGGTGCCTGCCA 19
XX
XX RESULT 1245
XX ADR80295
XX ID ADR80295 standard; DNA; 19 BP.
XX
XX AC ADR80295;
XX
XX XX
XX DT 16-DEC-2004 (first entry)

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XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4792.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0494597P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4792; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2486 TGGCAGTCTCCATGACCTC 2504  
 Db 1 TGGCAGTCTCCATGACCTC 19

RESULT 1246  
 ADR80299  
 ID ADR80299 standard; DNA; 19 BP.  
 XX  
 AC ADR80299;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4796.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4796; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3028 AGCAAGTCTTCTCTGCGCT 3046  
 Db 1 AGCAAGTCTTCTCTGCGCT 19

RESULT 1247  
 ADR80306  
 ID ADR80306 standard; DNA; 19 BP.  
 XX  
 AC ADR80306;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4803.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4796; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4803; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1085 AAAGCAGCCGAAAGCTGTT 1103  
 |||||  
 DB 1 AAAGCAGCCGAAAGCTGTT 19  
 RESULT 1248  
 ADR80354  
 ID ADR80354 standard; DNA; 19 BP.  
 XX  
 AC ADR80354;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4851.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4851; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2577 ATCAGGAGGGCTCAAGA 2595  
 DB 1 ATCAGGAGGGCTCAAGA 19  
 |||||

RESULT 1249  
 ID ADR80456 standard; DNA; 19 BP.  
 XX ADR80456;  
 AC ADR80456;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4953.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4953; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4225 TGTACAACTGGTCCGCCTC 4243  
 DB 1 TGTACAACTGGTCCGCCTC 19  
 |||||

RESULT 1250  
 ADR80708  
 ID ADR80708 standard; DNA; 19 BP.  
 XX ADR80708;  
 AC ADR80708;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 5205.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 5205; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3946 TCCAGAAAACCTCTCTT 3964  
 Db 1 TCCAGAAAACCTCTCTT 19  
 RESULT 1251  
 ID ADR75527  
 XX ADR75527 standard; DNA; 19 BP.  
 ID  
 AC ADR75527;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 12.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 10-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 12; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4248 AGTGGTGGCAACACCAAGCA 4266  
 |||||  
 Db 1 AGTGGTGGCAACACCAAGCA 19

RESULT 1252  
 ADR75543  
 ID ADR75543 standard; DNA; 19 BP.

XX AC ADR75543;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 28.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX WO2004080406-A2.

XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 28; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 10 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 466 TGAAGAAAACCAAGAACTC 484  
 |||||  
 Db 1 TGAAGAAAACCAAGAACTC 19

RESULT 1253  
 ADR75554  
 ID ADR75554 standard; DNA; 19 BP.

XX AC ADR75554;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 39.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX WO2004080406-A2.

XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.





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Db      1 GGGCAAAAGCTCTTACAGA 19
RESULT 1255
ADNR75621 standard; DNA; 19 BP.
XX      ADNR75621;
AC      ADNR75621;
XX      16-DEC-2004 (first entry)
DT      Human apolipoprotein B (apoB) oligonucleotide seqid 106.
DE
XX      antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX      Homo sapiens.
XX      WO2004080406-A2.
XX      23-SEP-2004.
XX      08-MAR-2004; 2004WO-US007070.
XX      07-MAR-2003; 2003US-0452682P.
XX      12-MAR-2003; 2003US-0454265P.
XX      13-MAR-2003; 2003US-0454962P.
XX      13-MAR-2003; 2003US-0455050P.
XX      14-APR-2003; 2003US-0462894P.
XX      17-APR-2003; 2003US-0463772P.
XX      25-APR-2003; 2003US-0465665P.
XX      25-APR-2003; 2003US-0465802P.
XX      09-MAY-2003; 2003US-0469612P.
XX      08-AUG-2003; 2003US-0493986P.
XX      11-AUG-2003; 2003US-0494597P.
XX      26-SEP-2003; 2003US-0506341P.
XX      09-OCT-2003; 2003US-0510246P.
XX      10-OCT-2003; 2003US-0510318P.
XX      07-NOV-2003; 2003US-0518453P.
XX      (ALNY-) ALNYLAM PHARM.
XX      Manoharan M, Bumcrot D;
XX      WPI; 2004-677362/66.
XX      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 106; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (apoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
Matches 19; Conservative 0; Indels 0; Gaps 0;

QY 2628 AATGCCTTTGAACCTCCCA 2646  
|||||  
DB 1 AATGCCTTTGAACCTCCCA 19

RESULT 1256  
ADNR75643  
ID ADR75643 standard; DNA; 19 BP.  
XX ADR75643;  
XX 16-DEC-2004 (first entry)  
DT Human apolipoprotein B (apoB) oligonucleotide seqid 128.  
DE  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 106; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 128; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 323 TGGGACTGCTGATTCAAGA 341
DB 1 TGGGACTGCTGATTCAAGA 19
RESULT 1257
AD75658
ID AD75658 standard; DNA; 19 BP.
XX
AC AD75658;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 143.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
XX WO2004080406-A2.

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XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX PI WPI; 2004-677362/66.

XX DR

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery

XX PT disease, diabetes, cancer or neurological disease, comprises sense

XX PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 143; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a

XX CC sense sequence and an antisense sequence, where the sense sequences have

XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense

XX CC sequences have one or more asymmetrical phosphorothioate modifications

XX CC and the antisense sequence targets a human gene sequence. Also described

XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);

XX CC stabilising (I), involves selecting a sequence with activity and

XX CC introducing one or more asymmetrical modification in the sequence, where

XX CC the modification decreases nuclease sensitivity while not decreasing its

XX CC activity; a kit comprising (I) and instruction for its use; and a device

XX CC that can be dispense or administer a composition comprising (I). (I) is

XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX CC The subject is suffering from a disorder characterised by elevated or

XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,

XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant

XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX CC inhibit hepatic glucose production or for treating glucose-metabolism-

XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX CC lung cancer), neurological disease (e.g., Huntington disease or

XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 692 TCACCTTACCGTCAAGC 710

DB 1 TCACCTTACCGTCAAGC 19

RESULT 1258  
 ADR75661 standard; DNA; 19 BP.  
 ID ADR75661 standard; DNA; 19 BP.  
 AC ADR75661;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 146.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 146; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or disreulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 885 AGGAGCATGTGGCAGAAG 903  
 Db |||||  
 1 AGGAGCATGTGGCAGAAG 19  
 RESULT 1259  
 ADR75665  
 ID ADR75665 standard; DNA; 19 BP.  
 XX  
 AC ADR75665;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 150.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 146; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or disreulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 150; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1211 AGCAGTCACATCTCTCTTG 1229

Db 1 AGCAGTCACATCTCTCTTG 19

RESULT 1260

ADR75675

ID ADR75675 standard; DNA; 19 BP.

XX AC ADR75675;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 160.

XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 160; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1591 TTCTGCGGTCATTGGAAA 1609

Db 1 TTCTGCGGTCATTGGAAA 19

RESULT 1261

ADR75680

ID ADR75680 standard; DNA; 19 BP.

XX

AC ADR75680;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 165.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 165; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1982 TCTGAAGAATCTCAACTT 2000  
 Db 1 TCTGAAGAATCTCAACTT 19  
 RESULT 1262  
 ADR75685  
 ID ADR75685 standard; DNA; 19 BP.  
 XX  
 XX ADR75685;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 170.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 165; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 170; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2167 TTGGATTGCTTCAGCTGA 2185
DB 1 TTGGATTGCTTCAGCTGA 19
RESULT 1263
AD75691
ID AD75691 standard; DNA; 19 BP.
XX
AC AD75691;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 176.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dvalipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 176; 378pp; English.
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 10 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2351 CAAAGATGATTAACATGAG 2369
DB 1 CAAAGATGATTAACATGAG 19
RESULT 1264
AD75702
ID AD75702 standard; DNA; 19 BP.
XX
AC AD75702;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 187.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss;  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 187; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 7 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2904 ATTCTTCCCAAGAGAC 2922  
 |||||  
 DB 1 ATTCTTCCCAAGAGAC 19  
 |||||  
 RESULT 1265  
 ADR75706  
 ID ADR75706 standard; DNA; 19 BP.  
 XX  
 AC ADR75706;  
 DT  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 191.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 187; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or





KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 447; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 1 C; 4 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1954 AAGATCTGAAAAAGTTAGT 1972  
DB 1 AAGATCTGAAAAAGTTAGT 19  
RESULT 1268  
ADR75980  
ID ADR75980 standard; DNA; 19 BP.  
XX AC ADR75980;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 465.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 465; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC the subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2309 TGATGGTGCTCTAAGGTC 2327  
 Db 1 TGATGGTGCTCTAAGGTC 19  
 RESULT 1269  
 ADR75984  
 ID ADR75984 standard; DNA; 19 BP.  
 XX  
 AC ADR75984;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 469.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PT  
 PT Example 5; SEQ ID NO 469; 379pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 6 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2528 GATGGGTGCCCGCAGCTCTG 2546  
 Db 1 GATGGGTGCCCGCAGCTCTG 19  
 RESULT 1270  
 ADR76004  
 ID ADR76004 standard; DNA; 19 BP.  
 XX  
 AC ADR76004;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 489.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 489; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclelease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2843 CTTCCACGAGTCGGGTCTG 2861  
 |||||  
 Db 1 CTTCCACGAGTCGGGTCTG 19  
 RESULT 1271  
 ADR76049  
 ID ADR76049 standard; DNA; 19 BP.  
 XX  
 AC ADR76049;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 534.  
 XX  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 534; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclelease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4136 AGTCCCTACTTTTACCATT 4154  
 |||||  
 Db 1 AGTCCCTACTTTTACCATT 19

RESULT 1272

ADNR76255

ID ADNR76255 standard; DNA; 19 BP.

AC ADNR76255;

XX

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 740.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 09-MAY-2003; 2003US-045802P.

PR

PR 08-AUG-2003; 2003US-0459612P.

PR

PR 11-AUG-2003; 2003US-0493986P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

PR

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

XX

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 740; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX

XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 592 ACATCAAGAGGGGCATCAT 610

|||||

Db 1 ACATCAAGAGGGGCATCAT 19

RESULT 1273

ADNR76279

ID ADNR76279 standard; DNA; 19 BP.

XX

AC ADNR76279;

XX

DT 16-DEC-2004 (first entry)

XX

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 764.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX



CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 90 CCAGGCCGCGAGCCAGGAG 108  
 Db 1 CCAGGCCGCGAGCCAGGAG 19  
 |||||

RESULT 1275  
 ADR76341  
 ID ADR76341 standard; DNA; 19 BP.  
 XX  
 AC ADR76341;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 826.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0482894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PN Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 826; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 673 TGTATGGAACACTGCTCCAC 691  
 Db 1 TGTATGGAACACTGCTCCAC 19  
 |||||

RESULT 1276  
 ADR76379  
 ID ADR76379 standard; DNA; 19 BP.  
 XX  
 AC ADR76379;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 864.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0482894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PN Manoharan M, Bumcrot D;

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 864; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Best Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1222 CTCTCTGCCACAGCTCAT 1240  
|||||

Db 1 CTCTCTGCCACAGCTCAT 19

RESULT 1277

ADR76387

ID ADR76387 standard; DNA; 19 BP.

XX ADR76387;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 872.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 872; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1425 GCGAGGGATCAGCGCAGCC 1443  
 Db 1 GCGAGGGATCAGCGCAGCC 19  
 RESULT 1278  
 ADR76447  
 ID ADR76447 standard; DNA; 19 BP.  
 AC ADR76447;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 932.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0458022P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 932; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2341 TTGGCTATACCAAGATGA 2359  
 Db 1 TTGGCTATACCAAGATGA 19  
 RESULT 1279  
 ADR76481  
 ID ADR76481 standard; DNA; 19 BP.  
 XX  
 AC ADR76481;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 966.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 03-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 966; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2777 TGTGACAAATATGGGCATC 2795
Db 1 TGTGACAAATATGGGCATC 19
XX
RESULT 1280
ADR76649
ID ADR76649 standard; DNA; 19 BP.
XX
AC ADR76649;

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```

XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1134.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytotstatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1134; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2777 TGTGACAAATATGGGCATC 2795
Db 1 TGTGACAAATATGGGCATC 19
XX
RESULT 1280
ADR76649
ID ADR76649 standard; DNA; 19 BP.
XX
AC ADR76649;

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2734 TGCAGGCTGAACGTGGGC 2752  
 Db 1 TGCAGGCTGAACGTGGC 19

## RESULT 1281

ADNR76731

ID ADNR76731 standard; DNA; 19 BP.

XX AC ADNR76731;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1216.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0452894P.

XX PR 17-APR-2003; 2003US-0453772P.

XX PR 25-APR-2003; 2003US-0456655P.

XX PR 25-APR-2003; 2003US-0458022P.

XX PR 09-MAY-2003; 2003US-0459612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumrot D;

XX XX WPI; 2004-677362/66.

XX XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX PT disease, diabetes, cancer or neurological disease, comprise sense

XX PT sequence and antisense sequence which has specific modifications.

XX XX Example 5; SEQ ID NO 1216; 378pp; English.

XX PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, coronary artery disease, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

## Query Match

Best Local Similarity 0.1%; Score 19; DB 1; Length 19;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4300 TGAAGGCTGACTCTGTGGT 4318

Db 1 TGAAGGCTGACTCTGTGGT 19

## RESULT 1282

ADNR76802

ID ADNR76802 standard; DNA; 19 BP.

XX AC ADNR76802;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1287.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.



CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 9 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 85 CGAGCCAGCGCGCAGCCC 103

Db 1 CGAGCCAGCGCGCAGCCC 19

RESULT 1284

ID ADR76948 standard; DNA; 19 BP.

XX AC ADR76948;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1433.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX ES Example 5; SEQ ID NO 1433; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1943 ATTGGATATCCAGATCTG 1961

Db 1 ATTGGATATCCAGATCTG 19

RESULT 1285

ADNR77316

ID ADR77316 standard; DNA; 19 BP.

XX AC ADR77316;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1801.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1801; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4758 CTCACCTCCACCTCTGATC 4776  
 Db 1 CTCACCTCCACCTCTGATC 19  
 RESULT 1286  
 ADR77365  
 ID ADR77365 standard; DNA; 19 BP.  
 XX  
 AC ADR77365;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1850.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1850; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

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Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4602 GTCTCTTCGTTCTATGCTA 4620
Db 1 GTCTCTTCGTTCTATGCTA 19

RESULT 1287
ID ADR77402 standard; DNA; 19 BP.
XX
AC ADR77402;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1887.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-045802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1887; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD),
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4439 CAGTCATGTAGAAAACCTT 4457
Db 1 CAGTCATGTAGAAAACCTT 19

RESULT 1288
ID ADR77409 standard; DNA; 19 BP.
XX
AC ADR77409;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1894.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-045802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0493986P.
XX 26-SEP-2003; 2003US-0494597P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1887; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

```

PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1894; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4300 TGAAGGCTGACTCTGTGGT 4318  
 Db 1 TGAAGGCTGACTCTGTGGT 19  
 RESULT 1289  
 ADR77464  
 ID ADR77464 standard; DNA; 19 BP.  
 XX  
 AC ADR77464;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1949.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1949; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4300 TGAAGGCTGACTCTGTGGT 4318  
 Db 1 TGAAGGCTGACTCTGTGGT 19  
 RESULT 1289  
 ADR77464  
 ID ADR77464 standard; DNA; 19 BP.  
 XX  
 AC ADR77464;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1949.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



Qy 3697 CTTCCAAATTCCTGTTGA 3715  
 Db 1 CTTCCAAATTCCTGTTGA 19

RESULT 1290  
 ADR77563  
 ID ADR77563 standard; DNA; 19 BP.  
 AC ADR77563;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2048.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465663P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2048; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0-1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4677 GAGTCCAACTGAGGTTTA 4695

Db 1 GAGTCCAACTGAGGTTTA 19

RESULT 1291

ADR77568

ID ADR77568 standard; DNA; 19 BP.

AC ADR77568;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2053.

DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX



RESULT 1293  
 ADR78038  
 ID ADR78038 standard; DNA; 19 BP.  
 AC ADR78038;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2523.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2523; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instructions for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2908 CTTCCCAAGAGACCAAGT 2926

Db 1 CTTCCCAAGAGACCAAGT 19

RESULT 1294

ADR78164

ID ADR78164 standard; DNA; 19 BP.

AC ADR78164;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2649.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX PI

XX

```

DR  WIPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 2649; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instructions for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
XX  Sequence 19 BP; 9 A; 4 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX  Query Match 0.1%; Score 19; DB 1; Length 19;
XX  Best Local Similarity 100.0%; Pred. No. 6e+02;
XX  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY  633 GAGACAGAGAGCCCAAGC 651
Db  1 GAGACAGAGAGCCCAAGC 19
XX
RESULT 1295
AD78255
ID  AD78255 standard; DNA; 19 BP.
XX
XX  AD78255;
XX
XX  16-DEC-2004 (first entry)
XX
XX  Human apolipoprotein B (ApoB) oligonucleotide seqid 2740.
XX
XX  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX  cytostatic; anticonvulsant; nootropic; musculet; anti-HIV;
XX  RNA interference; iRNA; antisense technology; lipid metabolism;
XX  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX  coronary artery disease; CAD; coronary heart disease; CHD;
XX  atherosclerosis; hepatic glucose production;
XX  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX  colon cancer; lung cancer; neurological disease; Huntington disease;
XX  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
XX  WO2004080406-A2.
XX
XX  23-SEP-2004.
XX
XX  08-MAR-2004; 2004WO-US007070.
XX
XX  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465902P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  10-OCT-2003; 2003US-0510246P.
PR  09-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
XX  (ALNY-) ALNYLAM PHARM.
PA
XX  Manoharan M, Bumcrot D;
XX
XX  WIPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 2740; 378pp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instructions for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
XX  Sequence 19 BP; 0 A; 7 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX  Query Match 0.1%; Score 19; DB 1; Length 19;
XX  Best Local Similarity 100.0%; Pred. No. 6e+02;
XX  Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY  172 CTCGCTGCTGCTGCTGCT 190
Db  1 CTCGCTGCTGCTGCTGCT 19
XX
RESULT 1296
AD78262

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ID ADR78262 standard; DNA; 19 BP.  
 AC ADR78262;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2747.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2747; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 328 CTGCTGATTCGAAGAGTGC 346

Db 1 CTGCTGATTCGAAGAGTGC 19

RESULT 1297

ADR78266

ID ADR78266 standard; DNA; 19 BP.

XX

AC ADR78266;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2751.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR

XX 12-MAR-2003; 2003US-0454265P.

PR

XX 13-MAR-2003; 2003US-0454962P.

PR

XX 13-MAR-2003; 2003US-0455050P.

PR

XX 14-APR-2003; 2003US-0462894P.

PR

XX 17-APR-2003; 2003US-0463772P.

PR

XX 25-APR-2003; 2003US-0465665P.

PR

XX 25-APR-2003; 2003US-0465802P.

PR

XX 09-MAY-2003; 2003US-0469612P.

PR

XX 08-AUG-2003; 2003US-0493986P.

PR

XX 11-AUG-2003; 2003US-0494597P.

PR

XX 26-SEP-2003; 2003US-0506341P.

PR

XX 09-OCT-2003; 2003US-0510246P.

PR

XX 10-OCT-2003; 2003US-0510318P.

PR

XX 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Buncrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

```

PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 2751; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 362 CAAGTTGAGCTGGAGGTT 380
DB 1 CAAGTTGAGCTGGAGGTT 19

RESULT 1298
AD78268
ID AD78268 standard; DNA; 19 BP.
XX
AC AD78268;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2753.
XX
KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0519453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2753; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 392 CAGCTTCATCCTGAAGACC 410
DB 1 CAGCTTCATCCTGAAGACC 19

RESULT 1299
AD78273
ID AD78273 standard; DNA; 19 BP.
XX
XX AD78273;
XX
XX

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DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2758.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454982P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2758; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 483 TCTGAGGAGTTGCTGCAG 501  
 Db 1 TCTGAGGAGTTGCTGCAG 19  
 RESULT 1300  
 ADR78301  
 ID ADR78301 standard; DNA; 19 BP.  
 XX  
 AC ADR78301;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2786.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454982P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2758; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2114 TCCAAATAACTACTCTTCCT 2132  
 |||||  
 Db 1 TCCAAATAACTACTCTTCCT 19

RESULT 1301

ID ADR78342 standard; DNA; 19 BP.

XX ADR78342;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2827.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454862P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2827; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 0 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4177 TGCCTCTCTCGGTGTCT 4195  
 |||||  
 Db 1 TGCCTCTCTCGGTGTCT 19

RESULT 1302

AD78467

ID ADR78467 standard; DNA; 19 BP.

XX ADR78467;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2952.

XX



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX

(ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 2952; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 263 ATTCAGCACCTCCGGAAG 281  
 |||||  
 Db 1 ATTCAGCACCTCCGGAAG 19

RESULT 1303  
 ADR78469

ID ADR78469 standard; DNA; 19 BP.

AC ADR78469;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2954.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX

(ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 2954; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 493 TTGCTGCAGCCATGTCGAG 511  
 DB 1 TTGCTGCAGCCATGTCGAG 19  
 |||||

RESULT 1304  
 ADR78506  
 ID ADR78506 standard; DNA; 19 BP.  
 XX AC ADR78506;  
 XX DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2991.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT Example 5; SEQ ID NO 2991; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 364 AGGTTGAGCTGAGGTTTC 382  
 DB 1 AGGTTGAGCTGAGGTTTC 19  
 |||||

RESULT 1305  
 ADR78510  
 ID ADR78510 standard; DNA; 19 BP.  
 XX AC ADR78510;  
 XX DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2995.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465663P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2995; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 482 CTCTGAGGAGTTGCTGCA 500  
 Db 1 CTCTGAGGAGTTGCTGCA 19

RESULT 1306

ADR78525

ID ADR78525 standard; DNA; 19 BP.

XX

AC ADR78525;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3010.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

PI WPI; 2004-677362/66.

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3010; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 763 GTGATCGCTTCAAGCCCAT 781  
 Db 1 GTGATCGCTTCAAGCCCAT 19  
 RESULT 1307  
 ADNR78542  
 ID ADNR78542 standard; DNA; 19 BP.  
 XX AC ADNR78542;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3027.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3027; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1127 AAAACTAACCATCTCTGAG 1145  
 Db 1 AAAACTAACCATCTCTGAG 19  
 RESULT 1308  
 ADNR78546  
 ID ADNR78546 standard; DNA; 19 BP.  
 XX AC ADNR78546;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3031.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3031; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1198 GCCTCAGTGATGAAGCAGT 1216  
 |||||  
 Db 1 GCCTCAGTGATGAAGCAGT 19  
 RESULT 1309  
 ADR78565  
 ID ADR78565 standard; DNA; 19 BP.  
 XX AC ADR78565;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3050.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS XX  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3050; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1748 CCAGGAGTTCTCTTCAG 1766  
Db 1 CCAGGAGTTCTCTTCAG 19

RESULT 1310  
ADR78567  
ID ADR78567 standard; DNA; 19 BP.  
XX  
AC ADR78567;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3052.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN W02004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469632P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 10-OCT-2003; 2003US-0510246P.  
PR 09-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3052; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 2 A; 4 C; 3 G; 10 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1769 TTTCTTGATGATGCTTCT 1787  
Db 1 TTTCTTGATGATGCTTCT 19

RESULT 1311  
ADR78568  
ID ADR78568 standard; DNA; 19 BP.  
XX  
AC ADR78568;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3053.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX

PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3033; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1791 GGAGATAGCCACTGGCTG 1809  
 DB 1 GGAGATAGCCACTGGCTG 19

RESULT 1312  
 ADR78580  
 ID ADR78580 standard; DNA; 19 BP.  
 XX AC ADR78580;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3065.  
 XX KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3065; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1791 GGAGATAGCCACTGGCTG 1809  
 DB 1 GGAGATAGCCACTGGCTG 19





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PF 08-MAR-2004; 2004WO-US0007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3119; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3402 CTCACCTGGACATTCAGA 3420
Db 1 CTCACCTGGACATTCAGA 19
|||||
RESULT 1315
ADR78644
ID ADR78644 standard; DNA; 19 BP.

```

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XX
AC ADR78644;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3129.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3129; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3402 CTCACCTGGACATTCAGA 3420
Db 1 CTCACCTGGACATTCAGA 19
|||||
RESULT 1315
ADR78644
ID ADR78644 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3610 TTTCCAAGAGGGTGGCATG 3628  
 DB 1 TTTCCAAGAGGGTGGCATG 19

RESULT 1316  
 ADR78649  
 ID ADR78649 standard; DNA; 19 BP.  
 AC ADR78649;

XX  
 DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3134.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3134; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications.  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3642 GAGAAGATTGAATTTGAAT 3660  
 DB 1 GAGAAGATTGAATTTGAAT 19

RESULT 1317  
 ADR78665  
 ID ADR78665 standard; DNA; 19 BP.  
 AC ADR78665;

XX  
 DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3150.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 05-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3150; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e-02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 4114 ATCTGCCATCTCGAGAGTT 4132
Db 1 ATCTGCCATCTCGAGAGTT 19
|||||
|||||
RESULT 1318
ADR78684
ID ADR78684 standard; DNA; 19 BP.
XX
XX ADR78684;
XX
DT 16-DEC-2004 (first entry)

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XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3169.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytosstatic; anticoagulant; nootropic; muscula; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452692P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3169; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4830 CTGACTTTAAATCTGACA 4848  
 Db 1 CTGACTTTAAATCTGACA 19  
 |||||

RESULT 1319  
 ADR78883  
 ID ADR78883 standard; DNA; 19 BP.

XX  
 AC ADR78883;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3368.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US0007070.

XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.

XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3368; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1637 TCCAGAACTCAAGTCTTCA 1655  
 Db 1 TCCAGAACTCAAGTCTTCA 19  
 |||||

RESULT 1320  
 ADR78927  
 ID ADR78927 standard; DNA; 19 BP.

XX  
 AC ADR78927;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3412.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US0007070.

XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.

XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3368; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 PS Example 5; SEQ ID NO 3412; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 263 ATTCAGCACCTCCGGAG 281  
 DB 1 ATTCAGCACCTCCGGAG 19  
 RESULT 1321  
 AD78942  
 ID AD78942 standard; DNA; 19 BP.  
 XX  
 AC AD78942;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3427.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3427; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 10 A; 3 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 463 TGCTGAAGAAACCAAGAA 481  
 |||||  
 Db 1 TGCTGAAGAAACCAAGAA 19

RESULT 1322  
 ADNR79058  
 ID ADNR79058 standard; DNA; 19 BP.  
 AC ADNR79058;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3543.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-MAR-2003; 2003US-0455050P.  
 XX PR 17-APR-2003; 2003US-0462894P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3543; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2219 TGAGCCCAACATGGAGCT 2237  
 |||||  
 Db 1 TGAGCCCAACATGGAGCT 19

RESULT 1323  
 ADNR79065  
 ID ADNR79065 standard; DNA; 19 BP.  
 XX  
 XX AC ADNR79065;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3550.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-MAR-2003; 2003US-0455050P.  
 XX PR 17-APR-2003; 2003US-0462894P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3543; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3550; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QV 2341 TTGGCTATACCAAGATCA 2359
Db 1 TTGGCTATACCAAGATCA 19
RESULT 1324
ADR79093
ID ADR79093 standard; DNA; 19 BP.
XX
AC ADR79093;
XX
DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3578.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticoagulant; nootropic; musculla; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3578; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;

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Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2628 AATGCTTTGAACCTCCCA 2646  
 |||||  
 Db 1 AATGCTTTGAACCTCCCA 19

RESULT 1325  
 ADR79095  
 ID ADR79095 standard; DNA; 19 BP.

XX AC ADR79095;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3580.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 15-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX PA  
 XX PI Manoharan M, Bumcrot D;  
 XX PD WPI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3580; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2702 CAAGGCTGGAGTAAACTG 2720  
 |||||  
 Db 1 CAAGGCTGGAGTAAACTG 19

RESULT 1326  
 ADR79100  
 ID ADR79100 standard; DNA; 19 BP.

XX AC ADR79100;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3595.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 15-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.



```

PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3585; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2804 GGACTTCGCTAGGAGTGGG 2822
DB 1 GGACTTCGCTAGGAGTGGG 19
XX
RESULT 1327
ID ADR79159
XX ADR79159 standard; DNA; 19 BP.
XX
AC ADR79159;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3644.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; RNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0482894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3644; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3994 TGAACAAGAACAGTTTGA 4012

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Db      1 TGAACAGAACAGCTTTGAA 19
RESULT 1328
ID      ADR79163 standard; DNA; 19 BP.
XX      ADR79163;
XX      16-DEC-2004 (first entry)
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3648.
XX      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX      Homo sapiens.
XX      WO2004080406-A2.
XX      23-SEP-2004.
XX      08-MAR-2004; 2004WO-US0007070.
XX      07-MAR-2003; 2003US-0452682P.
XX      12-MAR-2003; 2003US-0454265P.
XX      13-MAR-2003; 2003US-0454962P.
XX      13-MAR-2003; 2003US-0455050P.
XX      14-APR-2003; 2003US-0462894P.
XX      17-APR-2003; 2003US-0463772P.
XX      25-APR-2003; 2003US-0465665P.
XX      25-APR-2003; 2003US-0465802P.
XX      09-MAY-2003; 2003US-0469612P.
XX      08-AUG-2003; 2003US-0493986P.
XX      11-AUG-2003; 2003US-0494597P.
XX      26-SEP-2003; 2003US-0506341P.
XX      09-OCT-2003; 2003US-0510246P.
XX      10-OCT-2003; 2003US-0510318P.
XX      07-NOV-2003; 2003US-0518453P.
XX      (ALNY-) ALNYLAM PHARM.
XX      Manoharan M, Bumcrot D;
XX      WPI; 2004-677362/66.
XX      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX      Example 5; SEQ ID NO 3648; 378pp; English.
XX      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instructions for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or disregrulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 4056 CTAAGATGCTTAGAGACTG 4074  
DB 1 CTAAGATGCTTAGAGACTG 19

RESULT 1329  
ADR79185  
ID ADR79185 standard; DNA; 19 BP.  
XX ADR79185;  
XX 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3670.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US0007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 3648; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3670; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4422 GATTCGAATATCAAAATTC 4440
DB 1 GATTCGAATATCAAAATTC 19
|||||
RESULT 1330
AD79189
ID AD79189 standard; DNA; 19 BP.
AC
AC AD79189;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3674.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
OS Homo sapiens.
XX
XX WO2004080406-A2.

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XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 09-MAY-2003; 2003US-0465802P.
XX PR 08-AUG-2003; 2003US-0469612P.
XX PR 11-AUG-2003; 2003US-0493986P.
XX PR 26-SEP-2003; 2003US-0494597P.
XX PR 09-OCT-2003; 2003US-0506341P.
XX PR 10-OCT-2003; 2003US-0510246P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3674; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 2 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4473 TCAAAAGGTTTACTAATAT 4491
DB 1 TCAAAAGGTTTACTAATAT 19
|||||
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 1331  
 ADR79196  
 ID ADR79196 standard; DNA; 19 BP.  
 AC ADR79196;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3691.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465680P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3681; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4615 ATGCTAAAGGCACATATGG 4633  
 DB 1 ATGCTAAAGGCACATATGG 19  
 RESULT 1332  
 ADR79208  
 ID ADR79208 standard; DNA; 19 BP.  
 AC ADR79208;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3693.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465680P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3681; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3693; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4950 TCATTGAGGTTCTTCAGCC 4968

Db 1 TCATTGAGGTTCTTCAGCC 19

RESULT 1333

ADR79837

ID ADR79837 standard; DNA; 19 BP.

XX AC ADR79837;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4331.

XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4331; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3279 TTCAATATAATCGGCAGA 3297

Db 1 TTCAATATAATCGGCAGA 19

RESULT 1334

ADR79863

ID ADR79863 standard; DNA; 19 BP.

XX



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PS Example 5; SEQ ID NO 4373; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2179 CAGCTGACCTCATCGAGAT 2197
Db 1 CAGCTGACCTCATCGAGAT 19

RESULT 1336
ADR80288
ID ADR80288 standard; DNA; 19 BP.
XX
AC ADR80288;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4785.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
FN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 4785; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2938 GTGGAGGCAACACATTACA 2956
Db 1 GTGGAGGCAACACATTACA 19

RESULT 1337
ADR80297
ID ADR80297 standard; DNA; 19 BP.
XX
AC ADR80297;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4794.  
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4794; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1819 TGTGTGATGAGGAGTCCTTC 1837  
Db 1 TGTGTGATGAGGAGTCCTTC 19  
RESULT 1338  
ADR80301  
ID ADR80301 standard; DNA; 19 BP.  
XX  
XX ADR80301;  
AC  
XX 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4798.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4798; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4829 GCTGACTTTAAATCTGAC 4847  
 |||||  
 Db 1 GCTGACTTTAAATCTGAC 19

RESULT 1339  
 ADR80309  
 ID ADR80309 standard; DNA; 19 BP.  
 AC ADR80309;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4806.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4806; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4602 GTCTTCGTTCTATGCTA 4620  
 |||||  
 Db 1 GTCTTCGTTCTATGCTA 19

RESULT 1340  
 ADR80390  
 ID ADR80390 standard; DNA; 19 BP.  
 XX  
 AC ADR80390;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4887.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469812P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4887; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. (M1)  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 2 A; 6 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3795 TTCCGGCAGCTGGGTCCA 3813  
 Db 1 TTCCGGCAGCTGGGTCCA 19  
 RESULT 1341  
 ADR80396  
 ID ADR80396 standard; DNA; 19 BP.  
 XX  
 AC ADR80396;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4893.  
 XX  
 KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469812P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4893; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. (M1)  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4272 CATTTCAGGCTTCGGGCTC 4290  
 Db 1 CATTTCAGGCTTCGGGCTC 19  
 RESULT 1342  
 ADR75524  
 ID ADR75524 standard; DNA; 19 BP.  
 AC ADR75524;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 9.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 9; 378bp; English.  
 CC  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1315 AGTGGCTGAACCTGTGCA 1333  
 Db 1 AGTGGCTGAACCTGTGCA 19  
 RESULT 1343  
 ADR75556  
 ID ADR75556 standard; DNA; 19 BP.  
 XX  
 AC ADR75556;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 41.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 41; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1296 TGTCTCACTCACATCTCC 1314  
 Db 1 TGTCTCACTCACATCTCC 19  
 RESULT 1344  
 ADR75613  
 ID ADR75613 standard; DNA; 19 BP.  
 XX  
 AC ADR75613;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 98.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 98; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or-  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apob gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2419 ATTGGAATCCCAAGAGT 2437  
 Db |||||  
 1 ATTGGAATCCCAAGAGT 19  
 RESULT 1345  
 ADR75617  
 ID ADR75617 standard; DNA; 19 BP.  
 XX  
 AC ADR75617;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 102.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485655P.  
 PR 25-APR-2003; 2003US-0485802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 102; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apob gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1886 TGAGCAAGTGAAGACTTT 1904  
 Db |||||  
 1 TGAGCAAGTGAAGACTTT 19  
 RESULT 1346  
 ADR75645  
 ID ADR75645 standard; DNA; 19 BP.  
 XX  
 AC ADR75645;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 130.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 130; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 344 TGCCACCAGGATCAACTGC 362  
 |||||||||||||||||||

Db 1 TGCCACCAGGATCAACTGC 19  
 RESULT 1347  
 ADR75649  
 ID ADR75649 standard; DNA; 19 BP.  
 XX ADR75649;  
 AC ADR75649;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 134.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 130; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 344 TGCCACCAGGATCAACTGC 362  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administering to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 387 CTCGAGCTTCATCTGA 405  
 Db 1 CTCGAGCTTCATCTGA 19

# RESULT 1348

ADR75669

ID ADR75669 standard; DNA; 19 BP.

AC ADR75669;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 154.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455030P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

PR

XX (ALNY-) ALNYLAM PHARM.

PA

XX Manoharan M, Bumcrot D;

FI

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WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 154; 379pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administering to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1408 GAGAGATCTTCAACATGGC 1426

Db 1 GAGAGATCTTCAACATGGC 19

# RESULT 1349

ADR75688

ID ADR75688 standard; DNA; 19 BP.

AC ADR75688;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 173.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 173; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence has  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2256 TTTTCCACACAGTGCA 2274  
 Db 1 TTTTCCACACAGTGCA 19  
 RESULT 1350

ADR75849  
 ID ADR75849 standard; DNA; 19 BP.  
 XX  
 AC ADR75849;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 334.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 334; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 263 ATTCAAGCACCTCCGGAAG 281  
 Db 1 ATTCAAGCACCTCCGGAAG 19  
 RESULT 1351  
 ADR75850  
 ID ADR75850 standard; DNA; 19 BP.  
 XX  
 AC ADR75850;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 335.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 335; 379pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, CAD,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 326 GACTGCTGATTCAGGAAGT 344  
 Db 1 GACTGCTGATTCAGGAAGT 19

RESULT 1352

ADR75906

ID ADR75906 standard; DNA; 19 BP.

XX

AC ADR75906;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 391.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 391; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 762 TGTGATCGCTTCAGCCCA 780  
 Db 1 TGTGATCGCTTCAGCCCA 19  
 RESULT 1353  
 AD75911  
 ID AD75911 standard; DNA; 19 BP.  
 XX  
 AC AD75911;

XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 396.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 396; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 830 CTTGCAACTCTGATCAGC 848  
 Db 1 CTTGCAACTCTGATCAGC 19

RESULT 1354

ADR75912

ID ADR75912 standard; DNA; 19 BP.

AC ADR75912;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 397.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 397; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, coronary artery disease, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 902 AGCCATCTGCAAGGAGCAA 920

Db 1 AGCCATCTGCAAGGAGCAA 19

RESULT 1355

ADR75944

ID ADR75944 standard; DNA; 19 BP.

AC ADR75944;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 429.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 429; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 66+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1628 GCAGTTAACTCCAGAACTC 1646
XX |||||
XX Db 1 GCAGTTAACTCCAGAACTC 19
XX
XX RESULT 1356
XX ADR75948
XX ID ADR75948 standard; DNA; 19 BP.
XX
XX AC ADR75948;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 433.

```

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US0007070.

07-MAR-2003; 2003US-0453682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 433; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 66+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1628 GCAGTTAACTCCAGAACTC 1646  
|||||

Db 1 GCAGTTAACTCCAGAACTC 19

RESULT 1356  
ADR75948  
ID ADR75948 standard; DNA; 19 BP.  
AC ADR75948;  
XX  
XX  
DT 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 433.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1754 GGTTCCTCTTCAGACTTC 1772  
 Db 1 GGTTCCTCTTCAGACTTC 19  
 RESULT 1357  
 ADR75959  
 ID ADR75959 standard; DNA; 19 BP.  
 XX  
 AC ADR75959;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 444.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0489612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0510318P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 444; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1948 ATATCCAGATCTGAAAAA 1966  
 Db 1 ATATCCAGATCTGAAAAA 19

RESULT 1358  
 ADR75975

ID ADR75975 standard; DNA; 19 BP.

XX ADR75975;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 460.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 460; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 2216 CTTTGAGCCCAACATTGAA 2234  
Db 1 CTTTGAGCCCAACATTGAA 19  
  
RESULT 1359  
ADR75982  
ID ADR75982 standard; DNA; 19 BP.  
XX  
XX ADR75982;  
AC  
XX 16-DEC-2004 (first entry)  
DT  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 467.  
DE  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX

cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
Homo sapiens.  
WO2004080406-A2.  
23-SEP-2004.  
08-MAR-2004; 2004WO-US007070.  
07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454265P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465655P.  
09-MAY-2003; 2003US-0465802P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery  
disease, diabetes, cancer or neurological disease, comprises sense  
sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 467; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a  
sense sequence and an antisense sequence, where the sense sequences have  
one or more asymmetrical 2'-O alkyl modifications, the antisense  
sequences have one or more asymmetrical phosphorothioate modifications  
and the antisense sequence targets a human gene sequence. Also described  
are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
levels or glucose-6-phosphate levels in a subject; producing (I);  
stabilising (I), involves selecting a sequence with activity and  
introducing one or more asymmetrical modification in the sequence, where  
the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
can be used to control ApoB gene expression.  
Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2405 GAAGCTGATTAAAGATTG 2423  
 |||||  
 DB 1 GAAGCTGATTAAAGATTG 19

RESULT 1360  
 ADR75986  
 ID ADR75986 standard; DNA; 19 BP.  
 XX  
 AC ADR75986;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 471.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Mancharan M, Bumcrot D;  
 PI  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 471; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 0 G; 10 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2603 TTTTCTTCACTACATCTTC 2621  
 |||||  
 DB 1 TTTTCTTCACTACATCTTC 19

RESULT 1361  
 ADR75995  
 ID ADR75995 standard; DNA; 19 BP.  
 XX  
 AC ADR75995;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 480.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Mancharan M, Bumcrot D;  
 PI  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 471; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 480; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2646 ACTGGAGCTGGATTACAGT 2664
Db | | | | | | | | | | | | | | | | | |
XX 1 ACTGGAGCTGGATTACAGT 19
XX
RESULT 1362
ADNR76038
ID ADNR76038 standard; DNA; 19 BP.
XX
XX AC ADNR76038;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 523.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 523; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 3813 AAATTAATAGTGTCAATGA 3831  
 Db 1 AAATTAATAGTGTCAATGA 19

RESULT 1363  
 ADR76054  
 ID ADR76054 standard; DNA; 19 BP.  
 XX AC ADR76054;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 539.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 539; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4348 CTGAGAAACAAACATATGA 4366

Db 1 CTGAGAAACAAACATATGA 19

RESULT 1364

ADR76282

ID ADR76282 standard; DNA; 19 BP.

XX AC ADR76282;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 767.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0491986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

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PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 767; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4114 ATCTGCCATCTCGAGAGTT 4132
DB 1 ATCTGCCATCTCGAGAGTT 19
RESULT 1365
AD76319
ID AD76319 standard; DNA; 19 BP.
XX
AC AD76319;
XX
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 804.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.

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XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-045682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 804; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 414 CAGTGCACCTCGAAGAGG 432
DB 1 CAGTGCACCTCGAAGAGG 19

```

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 493 TTGCTGCAGCCATGTCACG 511  
|||||  
Db 1 TTGCTGCAGCCATGTCACG 19

RESULT 1367  
ADR76325  
ID ADR76325 standard; DNA; 19 BP.  
XX AC ADR76325;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 810.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
XX KW atherosclerosis; hepatic glucose production;  
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX OS Homo sapiens.  
XX XX WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX PA (ALNY-) ALNYLAM PHARM.  
XX XX Manoharan M, Bumcrot D;  
XX PI WPI; 2004-677362/66.  
XX DR  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS  
XX PS Example 5; SEQ ID NO 810; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 834; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 712 GGAAGGCAATGTGGCAAC 730
Db 1 GGAAGGCAATGTGGCAAC 19
|||||
|
RESULT 1368
AD76365
ID ADR76365 standard; DNA; 19 BP.
XX
XX AC ADR76365;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 850.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX W02004080406-A2.
XX
XX 23-SEP-2004.
XX

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 850; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 10 A; 5 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 988 AACTTGAAGACACACCAAA 1006
Db 1 AACTTGAAGACACACCAAA 19
|||||
|
RESULT 1369
ADR76386

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ADR76386 standard; DNA; 19 BP.  
 ADR76386;  
 16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 871.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 871; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1398 CAGCAGCTGCGAGAGATCT 1416

Db 1 CAGCAGCTGCGAGAGATCT 19

RESULT 1370

ADR76427

ID ADR76427 standard; DNA; 19 BP.

XX

AC ADR76427;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 912.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense

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sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 912; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1990 AATCTCAACTTCCAACTGT 2008
DB 1 AATCTCAACTTCCAACTGT 19

RESULT 1371
ADR76429
ID ADR76429 standard; DNA; 19 BP.
XX AC ADR76429;
DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 914.
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.

sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 914; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2039 TCAACTCTCAAAATCTGTT 2057
DB 1 TCAACTCTCAAAATCTGTT 19

RESULT 1372
ADR76433
ID ADR76433 standard; DNA; 19 BP.
XX AC ADR76433;

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16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 918.  
 antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 29-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 918; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Besc Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2094 GAAGGGAATCTTATATTG 2112  
 Db 1 GAAGGGAATCTTATATTG 19  
 RESULT 1373  
 ID ADR76441  
 XX ADR76441 standard; DNA; 19 BP.  
 AC ADR76441;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 926.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 29-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 926; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2220 GAGCCACATTGGAGCTC 2238  
 Db 1 GAGCCACATTGGAGCTC 19  
 |||||

RESULT 1374  
 ADR76445  
 ID ADR76445 standard; DNA; 19 BP.  
 XX  
 AC ADR76445;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 930.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-049612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI MPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 930; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2239 TTTTTCGGAGCAAGGATT 2257  
 Db 1 TTTTTCGGAGCAAGGATT 19  
 |||||

RESULT 1375  
 ADR76462  
 ID ADR76462 standard; DNA; 19 BP.  
 XX  
 AC ADR76462;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 947.  
 DE



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.

XX  
 XX WO2004080406-A2.

XX  
 XX 23-SEP-2004.

XX  
 XX 08-MAR-2004; 2004WO-US007070.

XX  
 XX 07-MAR-2003; 2003US-0452682P.

XX  
 XX 12-MAR-2003; 2003US-0454265P.

XX  
 XX 13-MAR-2003; 2003US-0454962P.

XX  
 XX 13-MAR-2003; 2003US-0455050P.

XX  
 XX 14-APR-2003; 2003US-0462894P.

XX  
 XX 17-APR-2003; 2003US-0463772P.

XX  
 XX 25-APR-2003; 2003US-0465665P.

XX  
 XX 25-APR-2003; 2003US-0465802P.

XX  
 XX 09-MAY-2003; 2003US-0469612P.

XX  
 XX 08-AUG-2003; 2003US-0493986P.

XX  
 XX 11-AUG-2003; 2003US-0494597P.

XX  
 XX 26-SEP-2003; 2003US-0506341P.

XX  
 XX 09-OCT-2003; 2003US-0510246P.

XX  
 XX 10-OCT-2003; 2003US-0510318P.

XX  
 XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 947; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nucleic acid sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2448 AGAGCTTACTTCGCGATCT 2466

Db 1 AGAGCTTACTTCGCGATCT 19

RESULT 1376

ADR76463

ID ADR76463 standard; DNA; 19 BP.

XX

AC ADR76463;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 948.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 948; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2449 GAGCCTACTCCGATCTT 2467  
 |||||  
 Db 1 GAGCCTACTCCGATCTT 19

RESULT 1377  
 ADR76492  
 ID ADR76492 standard; DNA; 19 BP.  
 AC ADR76492;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 977.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 977; 378pp; English.

XX The invention describes a RNA interference (IRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2950 CATTACATTTGGTCTCTAC 2968  
 |||||  
 Db 1 CATTACATTTGGTCTCTAC 19

RESULT 1378  
 ADR76500  
 ID ADR76500 standard; DNA; 19 BP.  
 AC ADR76500;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 985.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 985; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3185 CTATGAGCTCCAGAGAGAG 3203  
 |||||

Db 1 CTATGAGCTCCAGAGAGAG 19

RESULT 1379

ADR76698

ID ADR76698 standard; DNA; 19 BP.

XX

AC ADR76698;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1183.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 03-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

(ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1183; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;  
QY 3699 TCCAAATTCCTCTGGATC 3717  
DB 1 TCCAAATTCCTCTGGATC 19  
RESULT 1380  
AD76889  
ID ADR76889 standard; DNA; 19 BP.  
XX  
AC ADR76889;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1374.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
DR  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
PT  
XX Example 5; SEQ ID NO 1374; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;  
QY 3401 ACTCACCTGGACATTCAG 3419  
DB 1 ACTCACCTGGACATTCAG 19  
RESULT 1381  
AD76907  
ID ADR76907 standard; DNA; 19 BP.  
XX  
AC ADR76907;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1392.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1392; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD), and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Beat Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1905 GTGGCTTCCCATATTGCCA 1923  
 DB ||||| ||||| ||||| ||||| |||||  
 1 GTGGCTTCCCATATTGCCA 19  
 RESULT 1382  
 ADR77318  
 ID ADR77318 standard; DNA; 19 BP.  
 XX AC ADR77318;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1803.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1803; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD), and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Beat Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 5 C; 6 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1353 GATGCGTCACTACCTGG 1371  
DB 1 GATGCGTCACTACCTGG 19  
  
RESULT 1383  
ADR77321  
ID ADR77321 standard; DNA; 19 BP.  
XX  
AC ADR77321;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1806.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 28-APR-2003; 2003US-0465802P.  
PR 03-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1806; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1549 TTCAGATGACCTGCTGG 1567  
DB 1 TTCAGATGACCTGCTGG 19  
  
RESULT 1384  
ADR77329  
ID ADR77329 standard; DNA; 19 BP.  
XX  
AC ADR77329;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1814.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0506341P.  
 PR 26-SEP-2003; 2003US-0510246P.  
 PR 09-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1814; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3013 CCTGGTCAGTTTGCAAGCA 3031  
 Db 1 CCTGGTCAGTTTGCAAGCA 19

RESULT 1385  
 ADR77353  
 ID ADR77353 standard; DNA; 19 BP.  
 XX AC ADR77353;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1838.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1838; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3013 CCTGGTCAGTTTGCAAGCA 3031  
 Db 1 CCTGGTCAGTTTGCAAGCA 19

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1819 TGTGTGATGAGGAGTCCTTC 1837  
 DB 1 TGTGTGATGAGGAGTCCTTC 19

RESULT 1386  
 ADR77366  
 ID ADR77366 standard; DNA; 19 BP.  
 XX  
 AC ADR77366;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1851.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1851; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4601 AGTCTCTTCGTTCTATGCT 4619  
 DB 1 AGTCTCTTCGTTCTATGCT 19

RESULT 1387  
 ADR77385  
 ID ADR77385 standard; DNA; 19 BP.  
 XX  
 AC ADR77385;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1870.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytoetic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX





CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 4910 AATGCACTGCTGCTTCT 4928  
 Db 1 AATGCACTGCTGCTTCT 19  
 RESULT 1389  
 ADR77473  
 ID ADR77473 standard; DNA; 19 BP.  
 XX  
 AC ADR77473;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1958.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 28-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 1958; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 3524 AGCCAGAGTGTGAGATCCTC 3542  
 Db 1 AGCCAGAGTGTGAGATCCTC 19  
 RESULT 1390  
 ADR77496  
 ID ADR77496 standard; DNA; 19 BP.  
 XX  
 AC ADR77496;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1981.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 28-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1981; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3215 GGTGGATACCTCGAAGTTT 3233  
 Db 1 GGTGGATACCTCGAAGTTT 19  
 RESULT 1391  
 AD77535  
 ID AD77535 standard; DNA; 19 BP.  
 XX  
 AC AD77535;  
 XX  
 DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2020.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2020; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

```
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4188 GGTGTTCTAGACCTCTCCA 4206
DB 1 GGTGTTCTAGACCTCTCCA 19

RESULT 1392
ADR77554
ID ADR77554 standard; DNA; 19 BP.
XX
AC ADR77554;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2039.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
DR Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2039; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
```

```
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4473 TCAAAAGGTTTACTAATAT 4491
DB 1 TCAAAAGGTTTACTAATAT 19

RESULT 1393
ADR77572
ID ADR77572 standard; DNA; 19 BP.
XX
AC ADR77572;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2057.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
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PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465602P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2057; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4917 CTGCTGGCTTCTGAATATC 4935  
 Db 1 CTGCTGGCTTCTGAATATC 19  
 RESULT 1394  
 ADNR78142  
 ID ADNR78142 standard; DNA; 19 BP.  
 AC  
 XX ADNR78142;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2627.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

cytostatic; anticonvulsant; nootropic; muscula; anti-HIV.  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2627; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1315 AGTGGCTGAAACGTGTGCA 1333
DB 1 AGTGGCTGAAACGTGTGCA 19

RESULT 1395
ID ADR78175 standard; DNA; 19 BP.
XX
AC ADR78175;
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2660.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
(PALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2660; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described

```

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1321 TGAACGTGTGCATGCCAA 1339  
DB 1 TGAACGTGTGCATGCCAA 19

RESULT 1396  
ADR78233  
ID ADR78233 standard; DNA; 19 BP.  
XX  
AC ADR78233;  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2718.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW atherosclerosis; hepatic glucose production;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
(ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2660; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 FI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2718; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1100 TGTTCGAACTCTCCAG 1118  
 Db 1 TGTTCGAACTCTCCAG 19  
 RESULT 1397  
 ADR78243  
 ID ADR78243 standard; DNA; 19 BP.  
 XX  
 AC ADR78243;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2728.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454365P.  
 PR  
 XX 13-MAR-2003; 2003US-0454962P.  
 PR  
 XX 13-MAR-2003; 2003US-0455050P.  
 PR  
 XX 14-APR-2003; 2003US-0462894P.  
 PR  
 XX 17-APR-2003; 2003US-0463772P.  
 PR  
 XX 25-APR-2003; 2003US-0465665P.  
 PR  
 XX 25-APR-2003; 2003US-0465802P.  
 PR  
 XX 09-MAY-2003; 2003US-0469612P.  
 PR  
 XX 08-AUG-2003; 2003US-0493986P.  
 PR  
 XX 11-AUG-2003; 2003US-0494597P.  
 PR  
 XX 26-SEP-2003; 2003US-0506341P.  
 PR  
 XX 09-OCT-2003; 2003US-0510246P.  
 PR  
 XX 10-OCT-2003; 2003US-0510318P.  
 PR  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2728; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4615 ATGCTAAAGGCACATATGG 4633  
 |||||  
 Db 1 ATGCTAAAGGCACATATGG 19

RESULT 1398  
 ADR78263  
 ID ADR78263 standard; DNA; 19 BP.  
 XX  
 AC ADR78263;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2748.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2748; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 344 TGCCACCAGGATCACTGC 362  
 |||||  
 Db 1 TGCCACCAGGATCACTGC 19

RESULT 1399  
 ADR78264

ID ADR78264 standard; DNA; 19 BP.

XX ADR78264;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2749.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.



```

PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2749; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 345 GCCACCAGGATCAACTGCA 363
Db 1 GCCACCAGGATCAACTGCA 19
RESULT 1400
ADR78282
ID ADR78282 standard; DNA; 19 BP.
XX
XX ADR78282;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2767.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX XX
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX PA
XX PA Manoharan M, Bumcrot D;
XX PI WPI; 2004-677362/66.
XX PT
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2767; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1205 TGATGACGAGTCACATCT 1223
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      |||||||
1  TGATGAGCAGTCACATCT 19

RESULT 1401
ADR78313
ID  ADR78313 standard; DNA; 19 BP.
XX
AC  ADR78313;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 2798.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US0007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
PA  (ALNY-) ALNYLAM PHARM.
XX
PI  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
DR  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 2798; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described
CC  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Fred. No. 6e+02; 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2552 GATCCCCCAGATGATTGGA 2570  
|||||  
DB 1 GATCCCCCAGATGATTGGA 19

RESULT 1402  
ADR78474  
ID ADR78474 standard; DNA; 19 BP.  
XX  
AC ADR78474;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2959.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX  
PS Example 5; SEQ ID NO 2798; 378pp; English.
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2959; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1241 TGAGGTGTCAGCCCATC 1259
DB 1 TGAGGTGTCAGCCCATC 19
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

RESULT 1403
ADR78519
ID ADR78519 standard; DNA; 19 BP.
XX
XX ADR78519;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3004.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.

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XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454982P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 09-MAY-2003; 2003US-0465802P.
XX PR 08-AUG-2003; 2003US-0459612P.
XX PR 11-AUG-2003; 2003US-0493986P.
XX PR 26-SEP-2003; 2003US-0494597P.
XX PR 09-OCT-2003; 2003US-0506341P.
XX PR 10-OCT-2003; 2003US-0510246P.
XX PR 07-NOV-2003; 2003US-0510318P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3004; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 711 AGGAGGGCAATGTGGCAA 729
DB 1 AGGAGGGCAATGTGGCAA 19
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

```



PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3006; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD), coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 719 CAATGTGCAACAGAAATA 737

Db 1 CAATGTGCAACAGAAATA 19

RESULT 1406

ADR78524

ID ADR78524 standard; DNA; 19 BP.

XX ADR78524;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3009.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0456655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3009; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD), coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 762 TGTGATCGCTTCAAGCCCA 780

Db 1 TGTGATCGCTTCAAGCCCA 19

RESULT 1407

ADR78557

ID ADR78557 standard; DNA; 19 BP.

XX

AC ADR78557;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3042.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3042; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.  
 XX  
 XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. Ge+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1526 TGCTAATTACCTGATGGAA 1544  
 Db 1 TGCTAATTACCTGATGGAA 19  
 RESULT 1408  
 ADR78560  
 ID ADR78560 standard; DNA; 19 BP.  
 XX  
 AC ADR78560;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3045.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3042; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 3045; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1570 ATGAGATTACACCTATT 1588
DB 1 ATGAGATTACACCTATT 19
RESULT 1409
ID ADR78570
XX ADR78570 standard; DNA; 19 BP.
XX
XX ADR78570;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3055.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 08-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3055; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1900 ACTTTGTGGCTTCCCATAT 1918
DB 1 ACTTTGTGGCTTCCCATAT 19
RESULT 1410
AD78600
XX ADR78600 standard; DNA; 19 BP.
XX
XX ADR78600;
XX
XX 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3085.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3085; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 XX Matches 19; Conservative 0;  
 XX  
 QY 2405 GAAGCTGATTAAAGATTG 2423  
 DB 1 GAAGCTGATTAAAGATTG 19  
 XX  
 XX RESULT 1411  
 XX ADR78624  
 ID ADR78624 standard; DNA; 19 BP.  
 XX  
 XX AC ADR78624;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3109.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3085; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorders e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2876 CCTAAAGCTGGGAGCTG 2894

Db 1 CCTAAAGCTGGGAGCTG 19

RESULT 1412

ID ADR78647 standard; DNA; 19 BP.

AC ADR78647;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3132.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; tRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3132; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 0 C; 6 G; 4 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 19; DB 1; Length 19;

Db Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3635 TGATGAAGAGAGATTGAA 3653

Db 1 TGATGAAGAGAGATTGAA 19

RESULT 1413

ADR78648

ID ADR78648 standard; DNA; 19 BP.

AC ADR78648;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3133.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3133; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 8 A; 0 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3639 GAAGAGAGATTGAATTG 3657  
 DB 1 GAAGAGAGATTGAATTG 19  
 RESULT 1414  
 ADR78666  
 ID ADR78666 standard; DNA; 19 BP.  
 XX  
 AC ADR78666;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3151.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3133; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4122 TCTCGAGAGTTCACAGTCC 4140

DB 1 TCTCGAGAGTTCACAGTCC 19

RESULT 1415

ADR78687

ID ADR78687 standard; DNA; 19 BP.

XX ADR78687;

AC ADR78687;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3172.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3172; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4923 CGTTCGATATATCAGCGTG 4941  
 DB 1 CGTTCGATATATCAGCGTG 19  
 RESULT 1416  
 ADR78872  
 ID ADR78872 standard; DNA; 19 BP.  
 XX ADR78872;  
 AC ADR78872;  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3357.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4923 CGTTCGATATATCAGCGTG 4941

DB 1 CGTTCGATATATCAGCGTG 19

RESULT 1416

ADR78872

ID ADR78872 standard; DNA; 19 BP.

XX ADR78872;

AC ADR78872;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3357.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-MAR-2003; 2003US-0455050P.  
 XX PR 17-APR-2003; 2003US-0462894P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX XX WPI; 2004-677362/66.  
 XX  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX PS Example 5; SEQ ID NO 3357; 378pp; English.  
 XX  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 XX SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 482 CTCTGAGGAGTTTGCTGCA 500  
 DB 1 CTCTGAGGAGTTTGCTGCA 19  
 RESULT 1417  
 ADR78877  
 ID ADR78877 standard; DNA; 19 BP.  
 XX  
 XX AC ADR78877;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX  
 XX DE Human apolipoprotein B (Apob) oligonucleotide seqid 3362.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX PN WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PI Manoharan M, Bumcrot D;  
 XX  
 XX DR WPI; 2004-677362/66.  
 XX  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX PS Example 5; SEQ ID NO 3362; 378pp; English.  
 XX  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 XX SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1123 TGAATAAACTACCATCTC 1141

DB 1 TGAATAAACTACCATCTC 19

RESULT 1418

ADR78879

ID ADR78879 standard; DNA; 19 BP.

XX ADR78879;

AC ADR78879;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3364.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0456655P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3364; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1321 TGAACGTGTGCATGCCAA 1339

DB 1 TGAACGTGTGCATGCCAA 19

RESULT 1419

ADR78897

ID ADR78897 standard; DNA; 19 BP.

XX ADR78897;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3382.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.



CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Length 19;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 90 CCAGCGCCGAGCCGAGG 108  
 |||||  
 Db 1 CCAGCGCCGAGCCGAGG 19

## RESULT 1421

ADR78924

ID ADR78924 standard; DNA; 19 BP.

XX

AC ADR78924;

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3409.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX

XX 12-MAR-2003; 2003US-0454265P.

XX

XX 13-MAR-2003; 2003US-0454962P.

XX

XX 13-MAR-2003; 2003US-0455050P.

XX

XX 14-APR-2003; 2003US-0462894P.

XX

XX 17-APR-2003; 2003US-0463772P.

XX

XX 25-APR-2003; 2003US-0465802P.

XX

XX 09-MAY-2003; 2003US-0469612P.

XX

XX 08-AUG-2003; 2003US-0493986P.

XX

XX 11-AUG-2003; 2003US-0494597P.

XX

XX 26-SEP-2003; 2003US-0506341P.

XX

XX 09-OCT-2003; 2003US-0510246P.

XX

XX 10-OCT-2003; 2003US-0510318P.

XX

XX 07-NOV-2003; 2003US-0518453P.

XX

XX (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WO2004080406-A2.

XX

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3409; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 10 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 105 GGAGCGCCGCCGAGG 123

|||||

Db 1 GGAGCGCCGCCGAGG 19

## RESULT 1422

ADR78931

ID ADR78931 standard; DNA; 19 BP.

XX

AC ADR78931;

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3416.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

XX

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3416; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 353 GATCACTGCAAGGTTGAG 371  
 Db 1 GATCACTGCAAGGTTGAG 19  
 RESULT 1423

ADR78935  
 ID ADR78935 standard; DNA; 19 BP.  
 XX  
 AC ADR78935;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3420.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3420; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 395 CTTTCATCCTGAAGACCGC 413  
 Db 1 CTTTCATCCTGAAGACCGC 19  
 RESULT 1424  
 ADR78936  
 ID ADR78936 standard; DNA; 19 BP.  
 XX  
 AC ADR78936;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3421.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469622P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 FI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 3421; 378bp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 5 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 409 CCAGCCAGTGCACCTGAA 427  
 Db 1 CCAGCCAGTGCACCTGAA 19

RESULT 1425

ADR78976

ID ADR78976 standard; DNA; 19 BP.

XX

AC ADR78976;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3461.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3461; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX  
 SQ Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 918 CACACCTCTTCGCGCTT 936  
 Db 1 CACACCTCTTCGCGCTT 19  
 RESULT 1426  
 ADR78984  
 ID ADR78984 standard; DNA; 19 BP.  
 XX  
 AC ADR78984;

XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3469.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3461; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 918 CACACCTCTTCGCGCTT 936  
 Db 1 CACACCTCTTCGCGCTT 19  
 RESULT 1426  
 ADR78984  
 ID ADR78984 standard; DNA; 19 BP.  
 XX  
 AC ADR78984;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 1018 GCTCTTTTGGTGAAGTAC 1036  
 Db 1 GCTCTTTTGGTGAAGTAC 19

## RESULT 1427

ADR78987

ID ADR78987 standard; DNA; 19 BP.

XX AC ADR78987;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3472.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX XX WPI; 2004-677362/66.

XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 3472; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

## Query Match

Best Local Similarity 0.1%; Score 19; DB 1; Length 19;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1056 TTTGAGAGCACCAATCCA 1074

Db 1 TTTGAGAGCACCAATCCA 19

## RESULT 1428

ADR78990

ID ADR78990 standard; DNA; 19 BP.

XX AC ADR78990;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3475.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

```

PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3475; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1123 TGAATAAACTAACCACTC 1141
DB 1 TGAATAAACTAACCACTC 19
RESULT 1429
AD78992
ID ADR78992 standard; DNA; 19 BP.
XX
AC ADR78992;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3477.

```

```

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3477; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1123 TGAATAAACTAACCACTC 1141
DB 1 TGAATAAACTAACCACTC 19
RESULT 1429
AD78992
ID ADR78992 standard; DNA; 19 BP.
XX
AC ADR78992;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3477.

```

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 4 C; 3 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1140 TCTGACAAATATCCAGA 1158

Db 1 TCTGACAAATATCCAGA 19

RESULT 1430

ADR78994

ID ADR78994 standard; DNA; 19 BP.

XX ADR78994;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3479.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3479; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1186 CTGAGCTGAGAGGCTTCAG 1204

Db 1 CTGAGCTGAGAGGCTTCAG 19

RESULT 1431

ADR79015

ID ADR79015 standard; DNA; 19 BP.

XX ADR79015;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3500.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3500; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1635 ACTCCAGAACTCAAGTCTT 1653  
 Db 1 ACTCCAGAACTCAAGTCTT 19  
 RESULT 1432  
 ADR79016  
 ID ADR79016 standard; DNA; 19 BP.  
 XX  
 AC ADR79016;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3501.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3501; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1637 TCCAGAACTCAAGTCTTCA 1655
Db 1 TCCAGAACTCAAGTCTTCA 19

RESULT 1433
ADR79053
ID ADR79053 standard; DNA; 19 BP.
XX
AC ADR79053;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3538.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465655P.
PR 29-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0495977P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3538; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2168 TGCATTTCCTTCAGCTGAC 2186  
Db 1 TGCATTTCCTTCAGCTGAC 19

RESULT 1434  
ADR79055  
ID ADR79055 standard; DNA; 19 BP.  
XX  
AC ADR79055;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3540.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465655P.  
PR 29-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0495977P.  
PR 11-AUG-2003; 2003US-0493986P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 3538; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);





QY 2220 GAGCCACATTGGAAGCTC 2238  
 Db 1 GAGCCACATTGGAAGCTC 19

RESULT 1436  
 ADR79073  
 ID ADR79073 standard; DNA; 19 BP.  
 XX ADR79073;  
 AC ADR79073;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3558.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3558; 379pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2396 CAGTGTGAGAGCTGATT 2414

Db 1 CAGTGTGAGAGCTGATT 19

RESULT 1437

ADR79107

ID ADR79107 standard; DNA; 19 BP.

XX ADR79107;

AC ADR79107;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3592.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

PN

XX

XX 23-SEP-2004.

PD

XX

XX 08-MAR-2004; 2004WO-US007070.

PF

XX

XX 07-MAR-2003; 2003US-0452682P.

PR

XX 12-MAR-2003; 2003US-0454265P.

PR

XX 13-MAR-2003; 2003US-0454962P.

PR

XX 13-MAR-2003; 2003US-0455050P.

PR

XX 14-APR-2003; 2003US-0462894P.

PR

XX 17-APR-2003; 2003US-0463772P.

PR

XX 25-APR-2003; 2003US-0465665P.

PR

XX 25-APR-2003; 2003US-0465802P.

PR

XX 09-MAY-2003; 2003US-0469612P.

PR

XX 08-AUG-2003; 2003US-0493986P.

PR

XX 11-AUG-2003; 2003US-0494597P.

PR

XX 26-SEP-2003; 2003US-0506341P.

PR

XX 09-OCT-2003; 2003US-0510246P.

PR

XX 10-OCT-2003; 2003US-0510318P.

PR

XX 07-NOV-2003; 2003US-0518453P.

PR

XX

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PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3592; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2918 GAGACCAAGTCAAGTGTCTC 2936
DB 1 GAGACCAAGTCAAGTGTCTC 19
RESULT 1438
AD79108
ID AD79108 standard; DNA; 19 BP.
XX
AC AD79108;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3593.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.

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XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 13-MAR-2003; 2003US-0455050P.
XX
XX 14-APR-2003; 2003US-0462894P.
XX
XX 17-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3593; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2944 GCAACACATTACATTTGGT 2962
DB 1 GCAACACATTACATTTGGT 19

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DR 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
PT 13-MAR-2003; 2003US-0454962P.
PT 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
PS 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
CC 25-APR-2003; 2003US-046802P.
CC 09-MAY-2003; 2003US-0469612P.
CC 08-AUG-2003; 2003US-0493986P.
CC 11-AUG-2003; 2003US-0494597P.
CC 26-SEP-2003; 2003US-0506341P.
CC 09-OCT-2003; 2003US-0510246P.
CC 10-OCT-2003; 2003US-0510318P.
CC 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3625; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3520 CAGAGCCGAGAGTGAGAT 3538
Db 1 CAGAGCCGAGAGTGAGAT 19
|||||
RESULT 1441
ADR79141
ID ADR79141 standard; DNA; 19 BP.
XX
XX ADR79141;
AC
XX 16-DEC-2004 (first entry)
DT
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3626.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
OS
XX WO2004080406-A2.
PN
XX 23-SEP-2004.
PD

```

ID ADR79154 standard; DNA; 19 BP.  
 XX  
 AC ADR79154;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3639.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3639; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that CC can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3905 GGAGTTCAACCTCCAGAAC 3923  
 Db 1 GGAGTTCAACCTCCAGAAC 19

RESULT 1443

ADR79518

ID ADR79518 standard; DNA; 19 BP.

XX

AC ADR79518;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4010.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

PF

XX 07-MAR-2003; 2003US-0452682P.

PR

12-MAR-2003; 2003US-0454265P.

PR

13-MAR-2003; 2003US-0454962P.

PR

13-MAR-2003; 2003US-0455050P.

PR

14-APR-2003; 2003US-0462894P.

PR

17-APR-2003; 2003US-0463772P.

PR

25-APR-2003; 2003US-0465665P.

PR

25-APR-2003; 2003US-0465802P.

PR

09-MAY-2003; 2003US-0469612P.

PR

11-AUG-2003; 2003US-0494597P.

PR

26-SEP-2003; 2003US-0506341P.

PR

09-OCT-2003; 2003US-0510246P.

PR

10-OCT-2003; 2003US-0510318P.

PR

07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX

DR

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense

PT	sequence and antisense sequence which has specific modifications.	
XX	Example 5; SEQ ID NO 4010; 378pp; English.	
PS	The invention describes a RNA interference (iRNA) agent (I) comprising a	
XX	sense sequence and an antisense sequence, where the sense sequences have	
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense	
CC	sequences have one or more asymmetrical phosphorothioate modifications	
CC	and the antisense sequence targets a human gene sequence. Also described	
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100	
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);	
CC	stabilising (I), involves selecting a sequence with activity and	
CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	3068 TTACTCCAGCCAGCTCC 3086	
Db	1 TTACTCCAGCCAGCTCC 19	
	RESULT 1444	
AD	AD79598	
ID	AD79598 standard; DNA; 19 BP.	
XX		
AC	AD79598;	
XX		
DT	16-DEC-2004 (first entry)	
XX		
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 4092.	
XX		
KW	antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	

PR	12-MAR-2003; 2003US-0454265P.	
PR	13-MAR-2003; 2003US-0454962P.	
PR	13-MAR-2003; 2003US-0455050P.	
PR	14-APR-2003; 2003US-0462894P.	
PR	17-APR-2003; 2003US-0463772P.	
PR	25-APR-2003; 2003US-0465665P.	
PR	25-APR-2003; 2003US-0465802P.	
PR	09-MAY-2003; 2003US-0469612P.	
PR	08-AUG-2003; 2003US-0493986P.	
PR	11-AUG-2003; 2003US-0494597P.	
PR	26-SEP-2003; 2003US-0506341P.	
PR	09-OCT-2003; 2003US-0510246P.	
PR	10-OCT-2003; 2003US-0510318P.	
PR	07-NOV-2003; 2003US-0518453P.	
XX		
PA	(ALNY-) ALNYLAM PHARM.	
XX		
PI	Manoharan M, Bumcrot D;	
XX		
DR	WPI; 2004-677362/66.	
XX		
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery	
PT	disease, diabetes, cancer or neurological disease, comprises sense	
PT	sequence and antisense sequence which has specific modifications.	
XX		
PS	Example 5; SEQ ID NO 4092; 378pp; English.	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a	
CC	sense sequence and an antisense sequence, where the sense sequences have	
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense	
CC	sequences have one or more asymmetrical phosphorothioate modifications	
CC	and the antisense sequence targets a human gene sequence. Also described	
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100	
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);	
CC	stabilising (I), involves selecting a sequence with activity and	
CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	3068 TTACTCCAGCCAGCTCC 3086	
Db	1 TTACTCCAGCCAGCTCC 19	
	RESULT 1444	
AD	AD79598	
ID	AD79598 standard; DNA; 19 BP.	
XX		
AC	AD79598;	
XX		
DT	16-DEC-2004 (first entry)	
XX		
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 4092.	
XX		
KW	antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	

Query Match	0.1%;	Score 19;	DB 1;	Length 19;
Best Local Similarity	100.0%;	Pred. No. 6e+02;		
Matches	19;	Conservative	0;	Mismatches 0;
				Indels 0;
				Gaps 0;
QY	873	CTGGACGCTAAGAGGAGC	891	
Db	1	CTGGACGCTAAGAGGAGC	19	
		..f		
	RESULT 1445			
ID	AD79630			
XX	AD79630 standard; DNA; 19 BP.			
AC	AD79630;			
XX				

Query Match	0.1%;	Score 19;	DB 1;	Length 19;
Best Local Similarity	100.0%;	Pred. No. 6e+02;		
Matches	19;	Conservative	0;	Mismatches 0;
				Indels 0;
				Gaps 0;
QY	873	CTGGACGCTAAGAGGAGC	891	
Db	1	CTGGACGCTAAGAGGAGC	19	
		..f		
	RESULT 1445			
ID	AD79630			
XX	AD79630 standard; DNA; 19 BP.			
AC	AD79630;			
XX				

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4124.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-MAR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4124; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4730 AGGAAGATATGAGATGGA 4748

Db 1 AGGAAGATATGAGATGGA 19

RESULT 1446

ADR79893

ID ADR79893 standard; DNA; 19 BP.

XX AC ADR79893;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4389.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-MAR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4124; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2495 CCATGACCTCCAGCTCTG 2513  
 DB 1 CCATGACCTCCAGCTCTG 19  
 |||||

RESULT 1447  
 ADR79950  
 ID ADR79950 standard; DNA; 19 BP.  
 XX  
 AC ADR79950;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4446.  
 XX  
 KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 13-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI MPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4446; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2887 GGAAGCTGAAGTTTATCAT 2905  
 DB 1 GGAAGCTGAAGTTTATCAT 19  
 |||||

RESULT 1448  
 ADR79970  
 ID ADR79970 standard; DNA; 19 BP.  
 XX  
 AC ADR79970;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4466.  
 XX



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4466; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4577 AGTCAAGATTGATGGCAG 4595  
 |||||  
 Db 1 AGTCAAGATTGATGGCAG 19  
 RESULT 1449  
 ADR80385  
 ID ADR80385 standard; DNA; 19 BP.  
 XX  
 AC ADR80385;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4882.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4882; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4096 TCAAGTCTGTGGATTCCA 4114  
 DB 1 TCAAGTCTGTGGATTCCA 19  
 |||||

RESULT 1450  
 ADR80440  
 ID ADR80440 standard; DNA; 19 BP.  
 AC ADR80440;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4937.  
 DE  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-049597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX MPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 4937; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3215 GTGGATACCCCTGAAGTTT 3233  
 DB 1 GTGGATACCCCTGAAGTTT 19  
 |||||

RESULT 1451  
 ADR80451  
 ID ADR80451 standard; DNA; 19 BP.  
 XX  
 AC ADR80451;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4948.  
 DE  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4948; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 2 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4101 TCTGTGGGATTCCATCTGC 4119  
 Db 1 TCTGTGGGATTCCATCTGC 19

## RESULT 1452

ADR75517  
 ID ADR75517 standard; DNA; 19 BP.  
 XX  
 XX AC ADR75517;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2.  
 XX  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4948; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 2 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;	
	Matches 19; Conservative 0; Mismatches 0;	
QY	4117 TGCATCTCGAGAGTTCCA 4135	
DB		
	1 TGCATCTCGAGAGTTCCA 19	
RESULT 1453		
ADR75525		
ID	ADR75525 standard; DNA; 19 BP.	
XX		
AC	ADR75525;	
DT		
XX		
DE	16-DEC-2004 (first entry)	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 10.	
XX		
KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	
PR	12-MAR-2003; 2003US-0454265P.	
PR	13-MAR-2003; 2003US-0454962P.	
PR	13-MAR-2003; 2003US-0455050P.	
PR	14-APR-2003; 2003US-0462894P.	
PR	17-APR-2003; 2003US-0463772P.	
PR	25-APR-2003; 2003US-0465665P.	
PR	25-APR-2003; 2003US-0465802P.	
PR	09-MAY-2003; 2003US-0469612P.	
PR	08-AUG-2003; 2003US-0493986P.	
PR	11-AUG-2003; 2003US-0494597P.	
PR	26-SEP-2003; 2003US-0506341P.	
PR	09-OCT-2003; 2003US-0510246P.	
PR		
PR	10-OCT-2003; 2003US-0510318P.	
PR	07-NOV-2003; 2003US-0518453P.	
XX		
PA	(ALNY-) ALNYLAM PHARM.	
XX		
PI	Manoharan M, Bumcrot D;	
XX		
DR	WPI; 2004-677362/66.	
XX		
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery	
PT	disease, diabetes, cancer or neurological disease, comprises sense	
XX	sequence and antisense sequence which has specific modifications.	
XX		
PS	Example 5; SEQ ID NO 10; 378pp; English.	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a	
CC	sense sequence and an antisense sequence, where the sense sequences have	
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense	
CC	sequences have one or more asymmetrical phosphorothioate modifications	
CC	and the antisense sequence targets a human gene sequence. Also described	
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100	
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);	
CC	stabilising (I), involves selecting a sequence with activity and	
CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nuclease sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instruction for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)	
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant	
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or	
CC	lung cancer), neurological disease (e.g., Huntington disease or	
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence	
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that	
CC	can be used to control ApoB gene expression.	
XX		
SQ	Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;	
	Query Match 0.1%; Score 19; DB 1; Length 19;	
	Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;	
	Matches 19; Conservative 0; Mismatches 0;	
QY	2086 CCAAAATAGAGGGAATCT 2104	
DB		
	1 CCAAAATAGAGGGAATCT 19	
RESULT 1454		
ADR75534		
ID	ADR75534 standard; DNA; 19 BP.	
XX		
AC	ADR75534;	
XX		
DT	16-DEC-2004 (first entry)	
XX		
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 19.	
XX		
KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	
PR	12-MAR-2003; 2003US-0454265P.	
PR	13-MAR-2003; 2003US-0454962P.	
PR	13-MAR-2003; 2003US-0455050P.	
PR	14-APR-2003; 2003US-0462894P.	
PR	17-APR-2003; 2003US-0463772P.	
PR	25-APR-2003; 2003US-0465665P.	
PR	25-APR-2003; 2003US-0465802P.	
PR	09-MAY-2003; 2003US-0469612P.	
PR	08-AUG-2003; 2003US-0493986P.	
PR	11-AUG-2003; 2003US-0494597P.	
PR	26-SEP-2003; 2003US-0506341P.	
PR	09-OCT-2003; 2003US-0510246P.	
PR		

spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
Homo sapiens.  
WO2004080406-A2.  
23-SEP-2004.  
08-MAR-2004; 2004WO-US007070.  
07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454265P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 19; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.18; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

222 CTGGAATGTCAGCCTGG 240  
|||||  
1 CTGGAATGTCAGCCTGG 19  
RESULT 1455  
ADR75555  
ID ADR75555 standard; DNA; 19 BP.  
XX  
AC ADR75555;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 40.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
FI WPI; 2004-677362/66.  
XX  
DR  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 40; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1234 AGCTGATTGAGGTGCCAG 1252  
 Db 1 AGCTGATTGAGGTGCCAG 19  
 RESULT 1456  
 ADR75559  
 ID ADR75559 standard; DNA; 19 BP.  
 AC ADR75559;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 44.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 09-MAY-2003; 2003US-04933986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 44; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 6 C; 1 G; 10 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1756 TTCTTCTTCAGACTTTCCT 1774  
 Db 1 TTCTTCTTCAGACTTTCCT 19  
 RESULT 1457  
 ADR75579  
 ID ADR75579 standard; DNA; 19 BP.  
 XX  
 AC ADR75579;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 64.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WC2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 64; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 11 A; 2 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3678 GTAGATACCAAAAAATGA 3696  
 Db 1 GTAGATACCAAAAAATGA 19

RESULT 1458  
 ADR75582  
 ID ADR75582 standard; DNA; 19 BP.  
 XX  
 AC ADR75582;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 67.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 67; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 11 A; 2 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3678 GTAGATACCAAAAAATGA 3696  
 Db 1 GTAGATACCAAAAAATGA 19

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4563 TTCTTTGTCNAAAGATCA 4581  
 DB 1 TTCTTTGTCNAAAGATCA 19  
 |||||

RESULT 1459  
 ID ADR75616 standard; DNA; 19 BP.  
 XX  
 AC ADR75616;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 101.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 08-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 101; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1342 CCCTTCTGATAGATGTGGT 1360  
 DB 1 CCCTTCTGATAGATGTGGT 19  
 |||||

RESULT 1460  
 ADR75623  
 ID ADR75623 standard; DNA; 19 BP.  
 XX  
 AC ADR75623;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 108.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0452682P.
PR 13-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454265P.
PR 14-APR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0455050P.
PR 15-APR-2003; 2003US-0462894P.
PR 15-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465665P.
PR 08-AUG-2003; 2003US-0493986P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 108; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 3514 TGCAGCAGAGCCAGAG 3532
XX |||||
XX Db 1 TGCAGCAGAGCCAGAG 19
XX
XX RESULT 1461
XX ADR75646
XX ID ADR75646 standard; DNA; 19 BP.

```

```

XX
XX ADR75646;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 131.
XX
XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticoagulant; neurotropic; musclic; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454265P.
XX 14-APR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 131; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 3514 TGCAGCAGAGCCAGAG 3532
XX |||||
XX Db 1 TGCAGCAGAGCCAGAG 19
XX
XX RESULT 1461
XX ADR75646
XX ID ADR75646 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 6 A; 7 C; 4 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;  
  
QY 345 GCCACCAGGATCAACTGCA 363  
DB 1 GCCACCAGGATCAACTGCA 19  
  
RESULT 1462  
ADR75656  
ID ADR75656 standard; DNA; 19 BP.  
XX  
AC ADR75656;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 141.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465865P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510446P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
PD WPI; 2004-677362/66.  
XX  
PR Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX  
PS Example 5; SEQ ID NO 141; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;  
  
QY 492 TTGTGTCAGCATCTCCA 510  
DB 1 TTGTGTCAGCATCTCCA 19  
  
RESULT 1463  
ADR75854  
ID ADR75854 standard; DNA; 19 BP.  
XX  
AC ADR75854;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 339.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 339; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1220 ATCTCTCTTGCACAGCTG 1238
XX |||||
XX Db 1 ATCTCTCTTGCACAGCTG 19
XX
XX RESULT 1464
XX AD75856
XX ID AD75856 standard; DNA; 19 BP.
XX
XX AC AD75856;
XX
XX DT 16-DEC-2004 (first entry)

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XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 341.
XX
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0469612P.
XX PR 09-MAY-2003; 2003US-0493986P.
XX PR 08-AUG-2003; 2003US-0494597P.
XX PR 11-AUG-2003; 2003US-0493986P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 341; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1220 ATCTCTCTTGCACAGCTG 1238
XX |||||
XX Db 1 ATCTCTCTTGCACAGCTG 19
XX
XX RESULT 1464
XX AD75856
XX ID AD75856 standard; DNA; 19 BP.
XX
XX AC AD75856;
XX
XX DT 16-DEC-2004 (first entry)

```





```

XX  Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
SQ  Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  309 TCCAGTGGAGTCCCTGGGA 327
DB  1 TCCAGTGGAGTCCCTGGGA 19

RESULT 1468
AD75890
ID  ADR75890 standard; DNA; 19 BP.
XX
AC  ADR75890;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 375.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  11-AUG-2003; 2003US-0494597P.
PR  08-AUG-2003; 2003US-0493986P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
(PALNY-) ALNYLAM PHARM.
XX
PA  Manoharan M, Bumcrot D;
XX
PI  WPI; 2004-677362/66.
XX
DR  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 375; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described

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CC  are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involves selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
SQ  Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
    Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  388 TCTGACGCTTCATCCTGAA 406
DB  1 TCTGACGCTTCATCCTGAA 19

RESULT 1469
AD75900
ID  ADR75900 standard; DNA; 19 BP.
XX
AC  ADR75900;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 385.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  13-MAR-2003; 2003US-0455050P.
PR  14-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  11-AUG-2003; 2003US-0494597P.
PR  08-AUG-2003; 2003US-0493986P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
(PALNY-) ALNYLAM PHARM.
XX
PA  Manoharan M, Bumcrot D;
XX
PI  WPI; 2004-677362/66.
XX
DR  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 375; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described

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Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1934 CTCAGAAGATTGGATATC 1952  
 |||||  
 Db 1 CTCAGAAGATTGGATATC 19

RESULT 1471  
 ADR75965  
 ID ADR75965 standard; DNA; 19 BP.  
 AC ADR75965;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 450.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 15-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 450; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2017 TCAGAAATTCCTCGGAA 2035  
 |||||  
 Db 1 TCAGAAATTCCTCGGAA 19

RESULT 1472  
 ADR75990  
 ID ADR75990 standard; DNA; 19 BP.  
 AC ADR75990;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 475.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 15-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 450; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



```

PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 475; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2620 TCATGGAGATGCCCTTGA 2638
Db 1 TCATGGAGATGCCCTTGA 19
RESULT 1473
ADR75994
ID ADR75994 standard; DNA; 19 BP.
XX
XX ADR75994;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 479.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticongulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 479; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2645 CACTGGAGCTGGATTACAG 2663

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Db      ||||| 1 CACTCGAGCTGGATTACAG 19
RESULT 1474
ID      ADR76012 standard; DNA; 19 BP.
XX
AC      ADR76012;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 497.
XX
KW      antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US0007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      26-SEP-2003; 2003US-0510246P.
PR      09-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
XX      WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 497; 378pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instruction for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

```

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 2 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3323 AATTCGGATTGTGATGTT 3341  
|||||  
DB 1 AATTCGGATTGTGATGTT 19

RESULT 1475  
ADR76030  
ID ADR76030 standard; DNA; 19 BP.  
XX  
AC ADR76030;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 515.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 26-SEP-2003; 2003US-0510246P.  
PR 09-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 497; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

PI Manoharan M, Bumcrot D;  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 515; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 0 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3639 GAAGAGAGATTGAATTG 3657  
 DB 1 GAAGAGAGATTGAATTG 19  
 RESULT 1476  
 ADR76056  
 ID ADR76056 standard; DNA; 19 BP.  
 AC ADR76056;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 541.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN

XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 541; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4390 CATGTGATGGTCTCTACG 4408  
 DB 1 CATGTGATGGTCTCTACG 19  
 XX  
 XX

RESULT 1477  
 ADR76057 standard; DNA; 19 BP.  
 ID ADR76057;  
 AC ADR76057;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 542.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PN Manoharan M, Bumcrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 542; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;  
 XX

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. G+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX

QY 4417 TTCTAGATTTCGAATATCAA 4435  
 DB 1 TTCTAGATTTCGAATATCAA 19

RESULT 1478  
 ADR76306  
 ID ADR76306 standard; DNA; 19 BP.  
 XX  
 AC ADR76306;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 791.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PN Manoharan M, Bumcrot D;  
 XX  
 PD WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 542; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 791; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC dyslipidaemias, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 10 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 105 GGAGCGCGCCCGCCAGCAGC 123

DB 1 GGAGCGCGCCCGCCAGCAGC 19

RESULT 1479

ADR76322

ID ADR76322 standard; DNA; 19 BP.

XX AC ADR76322;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 807.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 807; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 441 TTCAACCCCTGAGGCAAG 459

DB 1 TTCAACCCCTGAGGCAAG 19

RESULT 1480

ADR76339

ID ADR76339 standard; DNA; 19 BP.

XX

AC ADR76339;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 824.  
 DE  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS  
 XX Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 824; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 639 GAAGAAGCCCAAGCAAGTGT 657  
 Db 1 GAAGAAGCCCAAGCAAGTGT 19  
 RESULT 1481  
 ADR76356  
 ID ADR76356 standard; DNA; 19 BP.  
 XX  
 AC ADR76356;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 841.  
 XX  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 824; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 841; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 912 AAGGAGCAACACCTCTTCC 930
DB 1 AAGGAGCAACACCTCTTCC 19
|||||
RESULT 1482
AD R76363
ID ADR76363 standard; DNA; 19 BP.
AC ADR76363;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 848.
DE
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX

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13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 848; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 965 AGCACAAGTGCACAGACT 983  
DB 1 AGCACAAGTGCACAGACT 19  
|||||  
RESULT 1483  
AD R76414  
ID ADR76414 standard; DNA; 19 BP.  
XX  
AC ADR76414;  
XX  
DT 16-DEC-2004 (first entry)  
XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 899.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

XX (ALNY-) ALNYLAM PHARM.

PA

PI Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

XX Example 5; SEQ ID NO 899; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphate levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphate levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC

XX

XX Sequence 19 BP; 8 A; 4 C; 1 G; 6 T; 0 U; 0 Other;

QQ

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0;

QY 1852 ACAAAATTGTCCAATTCT 1870

DB 1 ACAAAATTGTCCAATTCT 19

RESULT 1484

ADR76419

ID ADR76419 standard; DNA; 19 BP.

XX

AC ADR76419;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 904.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

XX (ALNY-) ALNYLAM PHARM.

PA

PI Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PT

XX Example 5; SEQ ID NO 904; 378pp; English.

PS

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphate levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphate levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modifications in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1906 TGGCTTCCCATATGCCAA 1924  
 DB 1 TGGCTTCCCATATGCCAA 19  
 RESULT 1485  
 ADR76449  
 ID ADR76449 standard; DNA; 19 BP.  
 AC ADR76449;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 934.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 934; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 SQ Sequence 19 BP; 7 A; 1 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2367 GAGCAGGATATGCTAAATG 2385  
 DB 1 GAGCAGGATATGCTAAATG 19  
 RESULT 1486  
 ADR76453  
 ID ADR76453 standard; DNA; 19 BP.  
 AC ADR76453;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 938.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW

KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 938; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2384 TGGATAATGCTCAGTGTT 2402

DB 1 TGGATAATGCTCAGTGTT 19

RESULT 1487

ADR76455

ID ADR76455 standard; DNA; 19 BP.

XX ADR76455;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 940.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 940; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2386 CAGTCTTGAGAGCTGATT 2414  
 Db 1 CAGTCTTGAGAGCTGATT 19

RESULT 1488  
 ADR76477  
 ID ADR76477 standard; DNA; 19 BP.  
 AC ADR76477;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 962.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 962; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2702 CAAGCTGGAGTAAACTG 2720  
 Db 1 CAAGCTGGAGTAAACTG 19

RESULT 1489  
 ADR76483  
 ID ADR76483 standard; DNA; 19 BP.  
 XX  
 AC ADR76483;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 968.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS  
XX Homo sapiens.  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 968; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 2818 GTGGGGTCCAGATGAACAC 2836  
|||||||  
Db 1 GTGGGGTCCAGATGAACAC 19  
  
RESULT 1490  
ADR76518  
ID ADR76518 standard; DNA; 19 BP.  
XX  
XX ADR76518;  
XX  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1003.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1003; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 12 A; 1 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3473 GGAAGAAAGAAATCAAG 3491  
 Db 1 GGAAGAAAGAAATCAAG 19  
 RESULT 1491  
 ADR76535  
 ID ADR76535 standard; DNA; 19 BP.  
 XX  
 AC ADR76535;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1020.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1020; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3698 TTCCAATTTCCCTGTGGAT 3716  
 Db 1 TTCCAATTTCCCTGTGGAT 19  
 RESULT 1492  
 ADR76646  
 ID ADR76646 standard; DNA; 19 BP.  
 XX  
 AC ADR76646;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1131.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1131; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2060 TCTTCATCACTTGACCCA 2078  
 ||||||||||||||||

Db 1 TCTTCATCACTTGACCCA 19  
 RESULT 1493  
 ADR76915  
 ID ADR76915 standard; DNA; 19 BP.  
 XX ADR76915;  
 AC ADR76915;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1400.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1131; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2060 TCTTCATCACTTGACCCA 2078  
 ||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3823 TTGCAATGAGCTCATGGCT 3841  
 Db 1 TTGCAATGAGCTCATGGCT 19  
 RESULT 1494  
 ADR76982  
 ID ADR76982 standard; DNA; 19 BP.  
 AC ADR76982;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1467.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 1467; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3343 ACCTCGGAACAATCTCTCAG 3361  
 Db 1 ACCTCGGAACAATCTCTCAG 19  
 RESULT 1495  
 ADR77277  
 ID ADR77277 standard; DNA; 19 BP.  
 AC ADR77277;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1762.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;

PD 23-SEP-2004.  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1762; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4961 CTTGAGCTGCTTCTGGA 4979  
 Db 1 CTTGAGCTGCTTCTGGA 19  
 RESULT 1496

ADR77345  
 ID ADR77345 standard; DNA; 19 BP.  
 XX ADR77345;  
 AC ADR77345;  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1830.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1830; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 2 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4550 AAAGAAACAGCATTGTTT 4568  
 Db 1 AAAGAAACAGCATTGTTT 19  
 RESULT 1497  
 ADR77354  
 ID ADR77354 standard; DNA; 19 BP.  
 XX  
 AC ADR77354;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1839.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454255P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0458022P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1839; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3029 GCAAGTCCTTCTGCGCTG 3047  
 Db 1 GCAAGTCCTTCTGCGCTG 19  
 RESULT 1498  
 ADR77355  
 ID ADR77355 standard; DNA; 19 BP.  
 XX  
 AC ADR77355;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1840.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454265P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 15-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1840; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3028 AGCAAGTCCTTCTCGGCT 3046  
 Db |||||  
 1 AGCAAGTCCTTCTCGGCT 19  
 RESULT 1499  
 ADR77437  
 ID ADR77437 standard; DNA; 19 BP.  
 XX  
 AC ADR77437;

XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1922.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1922; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3028 AGCAAGTCCTTCTCGGCT 3046  
 Db |||||  
 1 AGCAAGTCCTTCTCGGCT 19  
 RESULT 1499  
 ADR77437  
 ID ADR77437 standard; DNA; 19 BP.  
 XX  
 AC ADR77437;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 13 A; 1 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3471 AAGGAGAGAGAAATCA 3489  
 Db 1 AAGGAGAGAGAAATCA 19

RESULT 1500

ADR77450

ID ADR77450 standard; DNA; 19 BP.

AC ADR77450;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1935.

DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.  
 PN  
 XX

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-045802P.

PR 08-AUG-2003; 2003US-0459612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX

PS Example 5; SEQ ID NO 1935; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2686 TCATTGCTCCCGAGCCAA 2704

Db 1 TCATTGCTCCCGAGCCAA 19

RESULT 1501

ADR77470

ID ADR77470 standard; DNA; 19 BP.

AC ADR77470;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1955.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.  
 PN

XX 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1955; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3548 CTGGTCGCTGCCAACTG 3566  
 Db 1 CTGGTCGCTGCCAACTG 19  
 RESULT 1502  
 ADR77471  
 ID ADR77471 standard; DNA; 19 BP.  
 XX  
 AC ADR77471;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1956.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1956; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2682 GGAGTCATTGCTCCCGAG 2700  
 |||||  
 Db 1 GGAGTCATTGCTCCCGAG 19

RESULT 1504  
 ID ADR77486  
 ID ADR77486 standard; DNA; 19 BP.  
 XX  
 AC ADR77486;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1971.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-045802P.

XX 08-AUG-2003; 2003US-0459612P.

XX 11-AUG-2003; 2003US-0433986P.

XX 26-SEP-2003; 2003US-0494597P.

XX 09-OCT-2003; 2003US-0506341P.

XX 10-OCT-2003; 2003US-0510246P.

XX 07-NOV-2003; 2003US-0510318P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1971; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (1) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4189 GTGTTCTAGACCTCTCCAC 4207  
 |||||  
 Db 1 GTGTTCTAGACCTCTCCAC 19

RESULT 1504

ADNR77508

ID ADR77508 standard; DNA; 19 BP.

XX

AC ADR77508;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1993.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1993; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4100 GTCTGGGATTCACCTG 4118  
 |||||  
 Db 1 GTCTGGGATTCACCTG 19  
 RESULT 1505  
 AD877550  
 ID AD877550 standard; DNA; 19 BP.  
 AC  
 XX  
 AC AD877550;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2035.  
 DE  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2035; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4422 GATTTCGAATATCAAAATTCA 4440  
 Db 1 GATTTCGAATATCAAAATTCA 19

RESULT 1506  
 ADR78141  
 ID ADR78141 standard; DNA; 19 BP.  
 AC ADR78141;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2626.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 08-AUG-2003; 2003US-0469612P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2626; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1099 CTGTTTGAAGACTCTCCA 1117

Db 1 CTGTTTGAAGACTCTCCA 19

RESULT 1507

ADR78280

ID ADR78280 standard; DNA; 19 BP.

XX ADR78280;

XX

XX 16-DEC-2004 (first entry)

XX

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2765.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

XX Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0494597P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2765; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 911 CAAGGAGCAACCTCTTC 929
Db 1 CAAGGAGCAACCTCTTC 19
RESULT 1508
ADR78294
ID ADR78294: standard; DNA; 19 BP.
XX
AC ADR78294;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2779.
XX
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0463894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2779; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1638 CCAGAACTCAAGTCTTCAA 1656  
 Db 1 CCAGAACTCAAGTCTTCAA 19

RESULT 1509  
 ADR78334  
 ID ADR78334 standard; DNA; 19 BP.  
 XX  
 AC ADR78334;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2819.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytoetic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2819; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3878 TTGTGCAAGACCACTCAAT 3896  
 Db 1 TTGTGCAAGACCACTCAAT 19

RESULT 1510  
 ADR78501  
 ID ADR78501 standard; DNA; 19 BP.  
 XX  
 AC ADR78501;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2986.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytoetic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2819; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2986; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 0 A; 7 C; 8 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 161 GCTGGCGCTGCTGCGCTG 179  
 DB 1 GCTGGCGCTGCTGCGCTG 19  
 RESULT 1511  
 ADR78509  
 ID ADR78509 standard; DNA; 19 BP.  
 XX  
 AC ADR78509;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2994.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465663P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2994; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 412 GCCAGTGCACCTGGAAGA 430  
 DB 1 GCCAGTGCACCTGGAAGA 19  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 1512  
 ADR78512  
 ID ADR78512 standard; DNA; 19 BP.  
 CC  
 AC ADR78512;  
 CC  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2997.  
 CC  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 CC  
 OS Homo sapiens.  
 CC  
 XX WO2004080406-A2.  
 CC  
 XX  
 PD 23-SEP-2004.  
 CC  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 CC  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 CC  
 XX (ALNY-) ALNYLAM PHARM.  
 CC  
 XX  
 PI Manoharan M, Bumcrot D;  
 CC  
 XX WPI; 2004-677362/66.  
 CC  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 CC  
 XX  
 PS Example 5; SEQ ID NO 2997; 378pp; English.  
 CC  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 553 TCCTTTACCCGAGAAAGA 571

Db 1 TCCTTTACCCGAGAAAGA 19

RESULT 1513

ADR78528

ID ADR78528 standard; DNA; 19 BP.

AC ADR78528;

CC

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3013.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX



ID ADR78558 standard; DNA; 19 BP.  
 AC ADR78558;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3043.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465653P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3043; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1556 TGACTGCACCTGGGGATGAA 1574  
 |||||  
 Db 1 TGACTGCACCTGGGGATGAA 19

RESULT 1516

ADR78562

ID ADR78562 standard; DNA; 19 BP.

XX

AC ADR78562;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3047.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465653P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

PI WPI; 2004-677362/66.

XX

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense



DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3073.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3073; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I); involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 1 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2102 TCTTATATTGATCCAAAT 2120  
 Db 1 TCTTATATTGATCCAAAT 19  
 RESULT 1519  
 ADR78606  
 ID ADR78606 standard; DNA; 19 BP.  
 XX  
 AC ADR78606;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3091.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3073; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I); involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2613 TACATCTTCATGAGAAATG 2631

DB 1 TACATCTTCATGAGAAATG 19

RESULT 1520

ID ADR78623 standard; DNA; 19 BP.

XX ADR78623;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3108.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3108; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 2 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2850 GAGTCGGGTCTGGAGGCTC 2868

DB 1 GAGTCGGGTCTGGAGGCTC 19

RESULT 1521

ID ADR78642

XX ADR78642 standard; DNA; 19 BP.

XX ADR78642;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3127.

XX



antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cystostatic; anticoagulant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; OS.  
OS Homo sapiens.

**Homo sapiens.**

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US 0462773P

17-APR-2003; 2003US-04637/2P.  
25-APR-2003; 2003US-0465665P

25-APR-2003: 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09=OCT-2003; 2003US-0510246P.  
10=OCT-2003; 2003US-0510318P.

10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P

0. NO, 2005, 200302-0318433E.

(ALNY-) ALNYLAM PHARM.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3127; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of a disorder characterised by elevated levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3591 ACAGCTTATGGCTCCACG 3609  
 |||||  
 DB 1 ACAGCTTATGGCTCCACG 19

RESULT 1523  
 ADR78663  
 ID ADR78663 standard; DNA; 19 BP.  
 AC ADR78663;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3148.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX MPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3148; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 2 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4055 TCTAAGATGTTAGAGACT 4073  
 |||||  
 DB 1 TCTAAGATGTTAGAGACT 19

RESULT 1524  
 ADR78670  
 ID ADR78670 standard; DNA; 19 BP.  
 XX  
 AC ADR78670;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3155.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.

PN  
 XX  
 XX 23-SEP-2004.

XX  
 XX 08-MAR-2004; 2004WO-US007070.

XX  
 XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Buncrot D;

XX WPI; 2004-677362/66.

XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3155; 378pp; English.

XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

coronary artery disease; CAD; coronary heart disease; CHD;

glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

colon cancer; lung cancer; neurological disease; Huntington disease;

spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Buncrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3155; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a

sense sequence and an antisense sequence, where the sense sequences have

one or more asymmetrical 2'-O alkyl modifications, the antisense

sequences have one or more asymmetrical phosphorothioate modifications

and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

levels or glucose-6-phosphatase levels in a subject; producing (I);

stabilising (I), involves selecting a sequence with activity and

introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its

activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is

useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

Query Match

Best Local Similarity 0.1%; Score 19; DB 1; Length 19;

Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 4294 ACCACATGAAGGCTGACTC 4312

Db 1 ACCACATGAAGGCTGACTC 19

RESULT 1525

ADR78675

ID ADR78675 standard; DNA; 19 BP.

XX

AC ADR78675;

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3160.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;

KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Buncrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3160; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a

sense sequence and an antisense sequence, where the sense sequences have

one or more asymmetrical 2'-O alkyl modifications, the antisense

sequences have one or more asymmetrical phosphorothioate modifications

and the antisense sequence targets a human gene sequence. Also described

are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

levels or glucose-6-phosphatase levels in a subject; producing (I);

stabilising (I), involves selecting a sequence with activity and

introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its

activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is

useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

The subject is suffering from a disorder characterised by elevated or

otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,

dyslipidemias, hypercholesterolaemia, statin-resistant

hypercholesterolaemia, coronary artery disease (CAD), coronary heart

disease (CHD) and atherosclerosis. (I) is administered to a subject to

inhibit hepatic glucose production or for treating glucose-metabolism-

related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

treating the diseases as mentioned above, cancer (e.g. breast, colon or

lung cancer), neurological disease (e.g., Huntington disease or

spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 4417 TTCTAGATTGCAATATCAA 4435  
 Db 1 TTCTAGATTGCAATATCAA 19  
 RESULT 1526  
 ADR78884  
 ID ADR78884 standard; DNA; 19 BP.  
 AC ADR78884;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3369.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3369; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 1754 GGTTCCTCTTCAGACTTTC 1772  
 Db 1 GGTTCCTCTTCAGACTTTC 19  
 RESULT 1527  
 ADR78945  
 ID ADR78945 standard; DNA; 19 BP.  
 AC ADR78945;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3430.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3430; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ Best Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 500 AGCCATGTCAGGTATGAG 518  
 DB ||||| ||||| ||||| ||||| |||||  
 1 AGCCATGTCAGGTATGAG 19  
 RESULT 1528  
 ADR78996  
 ID ADR78996 standard; DNA; 19 BP.  
 XX AC ADR78996;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3481.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3481; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1210 AAGCAGTCACATCTCTCTT 1228  
 DB 1 AAGCAGTCACATCTCTCTT 19  
 RESULT 1529  
 ADR79004  
 ID ADR79004 standard; DNA; 19 BP.  
 XX  
 AC ADR79004;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3489.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454255P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494531P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3489; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1398 CAGCAGCTCGAGAGATCT 1416  
 DB 1 CAGCAGCTCGAGAGATCT 19  
 RESULT 1530  
 ADR79005  
 ID ADR79005 standard; DNA; 19 BP.  
 XX  
 AC ADR79005;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3490.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 11-AUG-2003; 2003US-049612P.  
 PR 09-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3490; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 4 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1425 GCGAGGGATCAGCGCAGCC 1443  
 Db 1 GCGAGGGATCAGCGCAGCC 19

RESULT 1531  
 ADR79045  
 ID ADR79045 standard; DNA; 19 BP.  
 XX AC ADR79045;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3530.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticorvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholestrol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3530; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1990 AATCTCAACTTCCAACGT 2008  
 |||||  
 Db 1 AATCTCAACTTCCAACGT 19

RESULT 1532  
 ADR79060  
 ID ADR79060 standard; DNA; 19 BP.  
 XX  
 AC ADR79060;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3545.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA  
 XX PI Manoharan M, Buncrot D;  
 XX  
 XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3545; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 3 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2225 AACATTGGAGCTCTTTT 2243  
 |||||  
 Db 1 AACATTGGAGCTCTTTT 19

RESULT 1533  
 ADR79084  
 ID ADR79084 standard; DNA; 19 BP.  
 XX  
 AC ADR79084;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3569.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 08-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3569; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2479 TTGGTTTTCGAGTCTCCA 2497
Db 1 TTGGTTTTCGAGTCTCCA 19
RESULT 1534
ADR79098
ID ADR79098 standard; DNA; 19 BP.

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XX AC ADR79098;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3583.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3583; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2479 TTGGTTTTCGAGTCTCCA 2497
Db 1 TTGGTTTTCGAGTCTCCA 19
RESULT 1534
ADR79098
ID ADR79098 standard; DNA; 19 BP.

```

```
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2775 TTTGTGACAAATATGGCA 2793
Db 1 TTTGTGACAAATATGGCA 19
RESULT 1535
AD79127
ID ADR79127 standard; DNA; 19 BP.
XX
AC ADR79127;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3612.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 23-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 28-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
```

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XX
PS Example 5; SEQ ID NO 3612; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3381 GAGGGCAAAACGCTTTACA 3399
Db 1 GAGGGCAAAACGCTTTACA 19
RESULT 1536
AD79133
ID ADR79133 standard; DNA; 19 BP.
XX
AC ADR79133;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3618.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 23-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 28-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
```

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3619; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3459 AGTTGTGACACAAAGGAAG 3477
Db 1 AGTTGTGACACAAAGGAAG 19
RESULT 1537
ADR79149
ID ADR79149 standard; DNA; 19 BP.
XX
XX ADR79149;
XX
XX 16-DEC-2004 (first entry)
DT

```

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XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3634.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0494597P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3634; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3459 AGTTGTGACACAAAGGAAG 3477
Db 1 AGTTGTGACACAAAGGAAG 19
RESULT 1537
ADR79149
ID ADR79149 standard; DNA; 19 BP.
XX
XX ADR79149;
XX
XX 16-DEC-2004 (first entry)
DT

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3695 GACTTCCAAATTTCCCTGTG 3713  
 |||||  
 Db 1 GACTTCCAAATTTCCCTGTG 19

RESULT 1538  
 ADR79174  
 ID ADR79174 standard; DNA; 19 BP.  
 XX  
 AC ADR79174;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3659.  
 XX.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3659; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4242 TCCTACAGTGGTGGCAACA 4260  
 |||||  
 Db 1 TCCTACAGTGGTGGCAACA 19

RESULT 1539  
 ADR79175  
 ID ADR79175 standard; DNA; 19 BP.  
 XX  
 AC ADR79175;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3660.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3659; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3660; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4290 CGTTACCACATGAGGCTG 4308  
 Db 1 CGTTACCACATGAGGCTG 19  
 RESULT 1540  
 AD79177  
 ID AD79177 standard; DNA; 19 BP.  
 XX  
 AC AD79177;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3662.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3662; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

```

XX  Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
SQ  Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  4313 TGTGGTTGACCTGCTTTCC 4331
Db  1 TGTGGTTGACCTGCTTTCC 19

RESULT 1541
AD79190
ID  ADR79190 standard; DNA; 19 BP.
XX
AC  ADR79190;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 3675.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  14-MAR-2003; 2003US-0455050P.
PR  17-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
(PALNY-) ALNYLAM PHARM.
XX
XX  Manoharan M, Bumcrot D;
XX
DR  WPI; 2004-677362/66.
XX
PT  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 3675; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described

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CC  are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC  levels or glucose-6-phosphatase levels in a subject; producing (I);
CC  stabilising (I), involve selecting a sequence with activity and
CC  introducing one or more asymmetrical modification in the sequence, where
CC  the modification decreases nuclease sensitivity while not decreasing its
CC  activity; a kit comprising (I) and instruction for its use; and a device
CC  that can be dispense or administer a composition comprising (I). (I) is
CC  useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC  is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidaemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
SQ  Sequence 19 BP; 8 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  4475 AAAAGTTTACTAATATTC 4493
Db  1 AAAAGTTTACTAATATTC 19

RESULT 1542
AD79203
ID  ADR79203 standard; DNA; 19 BP.
XX
AC  ADR79203;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 3688.
XX
KW  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  14-MAR-2003; 2003US-0455050P.
PR  17-APR-2003; 2003US-0462894P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-MAY-2003; 2003US-0469612P.
PR  08-AUG-2003; 2003US-0493986P.
PR  11-AUG-2003; 2003US-0494597P.
PR  26-SEP-2003; 2003US-0506341P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
(PALNY-) ALNYLAM PHARM.
XX
XX  Manoharan M, Bumcrot D;
XX
DR  WPI; 2004-677362/66.
XX
PT  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 3675; 378pp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3688; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e-02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4773 GATCTGCAAAAGTGCATCA 4791
XX Db 1 GATCTGCAAAAGTGCATCA 19
XX
XX RESULT 1543
XX AD79485
XX ID AD79485 standard; DNA; 19 BP.
XX
XX AC AD79485;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3977.
XX
XX XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;

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KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3977; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;

```

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4571 CAAAGAAGTCAAGATTGAT 4589  
|||||

Db 1 CAAAGAAGTCAAGATTGAT 19

RESULT 1544  
AD79508  
ID ADR79508 standard; DNA; 19 BP.

XX AC ADR79508;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4000.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0462894P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX DX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 4000; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control apoB gene expression.

XX Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2150 AACTACCCCTCACTGCCTTT 2168

Db 1 AACTACCCCTCACTGCCTTT 19

RESULT 1545

AD79583

ID ADR79583 standard; DNA; 19 BP.

XX AC ADR79583;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4075.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0462894P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4075; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 10 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3080 CAGCTCCACAGACTCCGCC 3098
Db 1 CAGCTCCACAGACTCCGCC 19
RESULT 1546
ADR79592
ID ADR79592 standard; DNA; 19 BP.
XX
AC ADR79592;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4084.
DE
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4084; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2735 GCAGGCTGAAGTGGTGGCA 2753

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Db 1 GCAGGCTGAACCTGGTCA 19  
 RESULT 1547  
 ID ADR79594 standard; DNA; 19 BP.  
 XX  
 AC ADR79594;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4086.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX  
 PS Example 5; SEQ ID NO 4086; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or disturbance of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 9 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4762 CCTCCACCTCTGATCTGCA 4780  
 Db 1 CCTCCACCTCTGATCTGCA 19  
 RESULT 1548  
 ADR79918  
 ID ADR79918 standard; DNA; 19 BP.  
 XX  
 AC ADR79918;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4414.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX  
 PS Example 5; SEQ ID NO 4086; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4414; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3624 GCATGGCATTATGATGAAG 3642
DB 1 GCATGGCATTATGATGAAG 19

RESULT 1549
ADR80221
ID ADR80221 standard; DNA; 19 BP.
AC ADR80221;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4718.
XX
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.

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XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4718; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4961 CTTGAGCTGCTTCTGGA 4979
DB 1 CTTGAGCTGCTTCTGGA 19

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RESULT 1550  
 ADR80345  
 ID ADR80345 standard; DNA; 19 BP.  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 2 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1930 TGAACCTCAGAGAAATTGGA 1948  
 DB 1 TGAACCTCAGAGAAATTGGA 19  
 RESULT 1551  
 ADR80371  
 ID ADR80371 standard; DNA; 19 BP.  
 CC antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 CC cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 CC RNA interference; iRNA; antisense technology; lipid metabolism;  
 CC cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 CC coronary artery disease; CAD; coronary heart disease; CHD;  
 CC atherosclerosis; hepatic glucose production;  
 CC glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 CC colon cancer; lung cancer; neurological disease; Huntington disease;  
 CC spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 PF 08-MAR-2004; 2004WO-US0007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 4842; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4868; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1996 AACTTCCCACTGTCATGGA 2014

DB 1 AACTTCCCACTGTCATGGA 19

RESULT 1552

ADR80430

ID ADR80430 standard; DNA; 19 BP.

XX AC

XX ADR80430;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4927.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX PD

XX 08-MAR-2004; 2004WO-US007070.

PF

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0493986P.

PR 08-AUG-2003; 2003US-0494597P.

PR 11-AUG-2003; 2003US-0506341P.

PR 26-SEP-2003; 2003US-0510246P.

PR 09-OCT-2003; 2003US-0510318P.

PR 10-OCT-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4927; 378pp; English.

PT The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4189 GTGTTCTAGACTCTCCAC 4207

DB 1 GTGTTCTAGACTCTCCAC 19

RESULT 1553

ADR80578

ID ADR80578 standard; DNA; 19 BP.

XX

AC ADR80578;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 5075.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 5075; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels...  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1098 GCTGTTTGAAGACTCTCC 1116  
 Db 1 GCTGTTTGAAGACTCTCC 19  
 RESULT 1554  
 ADR80606  
 ID ADR80606 standard; DNA; 19 BP.  
 XX  
 AC ADR80606;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 5103.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 5075; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels...  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 5103; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1943 ATTGGATATCCAGATCTG 1961
DB 1 ATTGGATATCCAGATCTG 19
RESULT 1555
AD75516
ID AD75516 standard; DNA; 19 BP.
XX
AC AD75516;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
PR 12-MAR-2003; 2003US-0454265P.
XX
PR 13-MAR-2003; 2003US-0454962P.
XX

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13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
09-MAY-2003; 2003US-0465802P.  
08-AUG-2003; 2003US-0469612P.  
11-AUG-2003; 2003US-0493986P.  
26-SEP-2003; 2003US-0494597P.  
09-OCT-2003; 2003US-0506341P.  
10-OCT-2003; 2003US-0510246P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 1; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 527 GCCCATTCAGAGGGAAG 545  
DB 1 GCCCATTCAGAGGGAAG 19  
RESULT 1556  
AD75547  
ID AD75547 standard; DNA; 19 BP.  
XX  
AC AD75547;  
XX  
DT 16-DEC-2004 (first entry)  
XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 32.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 08-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 26-SEP-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 32; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 689 CACTCCTTACCGTCAAG 707  
 |||||  
 Db 1 CACTCCTTACCGTCAAG 19

RESULT 1557  
 ADR75575  
 ID ADR75575 standard; DNA; 19 BP.

XX AC ADR75575;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 60.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 26-SEP-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 60; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3405 ACCCTGGACATTCAGACA 3423  
 DB 1 ACCCTGGACATTCAGACA 19  
 RESULT 1558  
 ADR75578  
 ID ADR75578 standard; DNA; 19 BP.  
 AC ADR75578;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 63.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 63; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 11 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3674 CAATGTAGATACCAAAAA 3692  
 DB 1 CAATGTAGATACCAAAAA 19

RESULT 1559  
 ADR75611  
 ID ADR75611 standard; DNA; 19 BP.  
 AC ADR75611;  
 XX  
 XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 96.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV,

KW RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 96; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 6e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2384 TGGAAATAGTCTCAGTGT 2402

DB 1 TGGAAATAGTCTCAGTGT 19

RESULT 1560

ADR75660

ID ADR75660 standard; DNA; 19 BP.

XX ADR75660;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 145.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manohatan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 145; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 871 CACTGGACGCTAAGAGGAA 889  
 Db 1 CACTGGACGCTAAGAGGAA 19  
 RESULT 1561  
 ADR75666  
 ID ADR75666 standard; DNA; 19 BP.  
 AC ADR75666;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 151.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 151; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 9 C; 1 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1249 CCAGCCCCCATCACTTTACA 1267  
 Db 1 CCAGCCCCCATCACTTTACA 19  
 RESULT 1562  
 ADR75690  
 ID ADR75690 standard; DNA; 19 BP.  
 XX  
 AC ADR75690;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 175.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 175; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2339 CTTTGCTATACCAAGAT 2357  
 |||||  
 Db 1 CTTTGCTATACCAAGAT 19  
 RESULT 1563  
 ADR75696  
 ID ADR75696 standard; DNA; 19 BP.  
 XX  
 AC ADR75696;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 181.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 181; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2559 CAGATGATTGGAGAGTCA 2577

Db 1 CAGATGATTGGAGAGTCA 19

RESULT 1564

ADR75704

ID ADR75704 standard; DNA; 19 BP.

AC ADR75704;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 189.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 189; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3160 TTGAGCAGTATTCTCTCAG 3178

Db 1 TTGAGCAGTATTCTCTCAG 19

RESULT 1565

ADR75712

ID ADR75712 standard; DNA; 19 BP.

AC ADR75712;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 197.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 197; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3691 AAATGACTTCCAATTCCC 3709  
 ||||||||||||||||||

Db 1 AAATGACTTCCAATTCCC 19  
 RESULT 1566  
 ADR75728  
 ID ADR75728 standard; DNA; 19 BP.  
 XX ADR75728;  
 AC ADR75728;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 213.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 213; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4514 ACCACAGATGTCGTCTCA 4532  
 |||||  
 Db 1 ACCACAGATGTCGTCTCA 19

## RESULT 1567

ADNR75733  
 ID ADNR75733 standard; DNA; 19 BP.

AC ADNR75733;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 218.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0482894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

XX

DR

XX

PT

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XX

PS

XX

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WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 218; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4836 TTAATAATCTGCACCAATG 4854

|||||

Db 1 TTAATAATCTGCACCAATG 19

## RESULT 1568

ADNR75851

ID ADNR75851 standard; DNA; 19 BP.

AC ADNR75851;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 336.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454365P.  
 PR 13-MAR-2003; 2003US-0454862P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 336; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 493 TTGCTGCGAGCATGTCAG 511  
 Db 1 TTGCTGCGAGCATGTCAG 19  
 RESULT 1569

ADR75942  
 ID ADR75942 standard; DNA; 19 BP.  
 XX  
 AC ADR75942;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 427.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 427; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1570 ATGAGATTACACCTATT 1588  
 Db 1 ATGAGATTACACCTATT 19

RESULT 1570

AD75950

ID AD75950 standard; DNA; 19 BP.

XX

AC AD75950;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 435.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0465962P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 435; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1791 GGAGATAAGCGACTGGCTG 1809

Db 1 GGAGATAAGCGACTGGCTG 19

RESULT 1571

AD76019

ID AD76019 standard; DNA; 19 BP.

XX

AC AD76019;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 504.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 504; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 1 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3496 TTATTTCCATACCCGTTT 3514  
 Db 1 TTATTTCCATACCCGTTT 19  
 RESULT 1572  
 ADR76050  
 ID ADR76050 standard; DNA; 19 BP.  
 XX  
 AC ADR76050;

XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 535.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 535; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 1 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3496 TTATTTCCATACCCGTTT 3514  
 Db 1 TTATTTCCATACCCGTTT 19  
 RESULT 1572  
 ADR76050  
 ID ADR76050 standard; DNA; 19 BP.  
 XX  
 AC ADR76050;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4143 ACTTTTACCATTCCTCCAGT 4161  
 Db 1 ACTTTTACCATTCCTCCAGT 19

RESULT 1573

ID ADR76323 standard; DNA; 19 BP.

XX ADR76323;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 808.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 808; 378pp; English.

PS

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 461 CTTGCTGAAGAAACCAAG 479  
 Db 1 CTTGCTGAAGAAACCAAG 19

RESULT 1574

AD76328

ID ADR76328 standard; DNA; 19 BP.

XX ADR76328;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 813.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-045665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 813; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
 QY 517 AGCTCAAGCTGGCCATTC 535  
 Db 1 AGCTCAAGCTGGCCATTC 19  
  
 RESULT 1575  
 ADR76338  
 ID ADR76338 standard; DNA; 19 BP.  
 XX  
 AC ADR76338;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 823.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US0007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 823; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 7 A; 6 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 625 TTCCCCCAGACAGAGA 643  
 DB 1 TTCCCCCAGACAGAGA 19  
 RESULT 1576  
 ID ADR76347 standard; DNA; 19 BP.  
 AC ADR76347;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 832.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0510318P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 832; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 709 CGAGGAGGCGCAATGTGGC 727  
 DB 1 CGAGGAGGCGCAATGTGGC 19  
 RESULT 1577  
 ADR76384  
 ID ADR76384 standard; DNA; 19 BP.  
 XX  
 AC ADR76384;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 869.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0510318P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 832; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 869; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1306 ACATCTCCAGTGGCTGAA 1324  
 Db 1 ACATCTCCAGTGGCTGAA 19  
 RESULT 1578  
 ADR76394  
 ID ADR76394 standard; DNA; 19 BP.  
 XX  
 AC ADR76394;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 879.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyotostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 879; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1592 TCTGCGGGTCAATTGGAAT 1610
Db 1 TCTGCGGGTCAATTGGAAT 19

RESULT 1579
ADR76458
ID ADR76458 standard; DNA; 19 BP.
XX
AC ADR76458;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 943.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 943; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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```

stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apob-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2418 GATTTGAATCCAAAGAAG 2436
Db 1 GATTTGAATCCAAAGAAG 19

RESULT 1580
ADR76494
ID ADR76494 standard; DNA; 19 BP.
XX
AC ADR76494;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 979.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 943; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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Qy 3400 GACTCACCTGGACATTCA 3418  
 Db 1 GACTCACCTGGACATTCA 19

RESULT 1582  
 ADR76557  
 ID ADR76557 standard; DNA; 19 BP.  
 XX AC ADR76557;  
 CC DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1042.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Buncrot D;  
 XX WI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 1042; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4240 CCTCTACAGTGGTGCAA 4258  
 Db 1 CCTCTACAGTGGTGCAA 19

RESULT 1583  
 ADR76920  
 ID ADR76920 standard; DNA; 19 BP.  
 XX AC ADR76920;  
 CC DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1405.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Buncrot D;  
 XX WI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 1042; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

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PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX DR WPI; 2004-677362/66.
XX
XX PT Interference RNA agent useful for treating dyslipidemiae, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 1405; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1678 CAAGCCATCACTGATGAT 1696
XX DB ||||| ||||| ||||| ||||| |||||
XX 1 CAAGCCATCACTGATGAT 19
XX
XX RESULT 1584
XX ADNR76934
XX ID ADNR76934 standard; DNA; 19 BP.
XX
XX AC ADNR76934;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1419.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.

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XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PP 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465865P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX XX Manoharan M, Bumcrot D;
XX
XX PI WPI; 2004-677362/66.
XX
XX PT Interference RNA agent useful for treating dyslipidemiae, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 1419; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2178 TCAGCTGACCTCATCGAGA 2196
XX DB ||||| ||||| ||||| ||||| |||||
XX 1 TCAGCTGACCTCATCGAGA 19

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RESULT 1585  
 ADR76965  
 ID ADR76965 standard; DNA; 19 BP.  
 CC  
 AC ADR76965;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1450.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 SS Example 5; SEQ ID NO 1450; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4982 ACTAAATTCCTGCTT 5000  
 DB 1 ACTAAATTCCTGCTT 19

RESULT 1586

ADR77017

ID ADR77017 standard; DNA; 19 BP.

AC ADR77017;

XX

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1502.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 SS Example 5; SEQ ID NO 1450; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1502; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4221 AACTGTACAACTGGTCCG 4239
Db |||||||||
Db 1 AACTGTACAACTGGTCCG 19

RESULT 1587
ADNR77309
XX ID ADNR77309 standard; DNA; 19 BP.
XX
XX AC ADNR77309;
XX
XX AC ADNR77309;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1794.
XX
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; RNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0453682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0463894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1794; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1098 GCTGTTTTGAAGACTCTCC 1116
Db |||||||||
Db 1 GCTGTTTTGAAGACTCTCC 19

RESULT 1588
ADNR77328

```

ID ADR77328 standard; DNA; 19 BP.  
 AC ADR77328;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1813.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1813; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 CC  
 SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3014 CTGGTCAGTTTGCAGCAA 3032  
 DB 1 CTGGTCAGTTTGCAGCAA 19  
 RESULT 1589  
 ADR77410  
 ID ADR77410 standard; DNA; 19 BP.  
 XX  
 AC ADR77410;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1895.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 1895; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2577 ATCAGGAAGGGCTCAAGA 2595
DB 1 ATCAGGAAGGGCTCAAGA 19

RESULT 1590
AD77445
ID AD77445 standard; DNA; 19 BP.
XX
AC AD77445;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1930.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
SS WO2004080406-A2.
XX
PN 23-SEP-2004.
XX
PD 08-MAR-2004; 2004WO-US007070.
XX
PF 07-MAR-2003; 2003US-0452682P.
XX
PR

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12-MAR-2003; 2003US-0454265P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.  
Manoharan M, Bumcrot D;  
WPI; 2004-677362/66.  
Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 1930; 378pp; English.  
The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (MI) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4549 AAAAGAAACAGCATTTGTT 4567  
DB 1 AAAAGAAACAGCATTTGTT 19  
RESULT 1591  
AD77533  
ID AD77533 standard; DNA; 19 BP.  
XX  
AC AD77533;  
XX

16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 2018.  
 antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 26-SEP-2003; 2003US-0494597P.  
 XX 09-OCT-2003; 2003US-0506341P.  
 XX 10-OCT-2003; 2003US-0510246P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2018; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 5 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4152 ATTCCCAAGTTGTATCAAC 4170  
 Db 1 ATTCCCAAGTTGTATCAAC 19  
 RESULT 1592  
 ADR77536  
 ID ADR77536 standard; DNA; 19 BP.  
 XX AC ADR77536;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2021.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 26-SEP-2003; 2003US-0494597P.  
 XX 09-OCT-2003; 2003US-0506341P.  
 XX 10-OCT-2003; 2003US-0510246P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2018; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

```
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4202 CTCACGAATGCTACAGC 4220
Db ||||| ||||| ||||| |||||
1 CTCACGAATGCTACAGC 19
RESULT 1593
ADR77546
ID ADR77546 standard; DNA; 19 BP.
XX
AC ADR77546;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2031.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 13-MAR-2003; 2003US-0455050P.
XX
XX 14-APR-2003; 2003US-0462894P.
XX
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2031; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
SQ Sequence 19 BP; 8 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4362 TATGACCACCAAGATACGT 4380
Db ||||| ||||| ||||| |||||
1 TATGACCACCAAGATACGT 19
RESULT 1594
ADR77553
ID ADR77553 standard; DNA; 19 BP.
XX
XX ADR77553;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2038.
XX
XX
```



KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW	RNA interference; iRNA; antisense technology; lipid metabolism;
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW	coronary artery disease; CAD; coronary heart disease; CHD;
KW	atherosclerosis; hepatic glucose production;
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW	colon cancer; lung cancer; neurological disease; Huntington disease;
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS	Homo sapiens.
XX	
PN	WO2004/080406-A2.
XX	
PD	23-SEP-2004.
XX	
PF	08-MAR-2004; 2004WO-US007070.
XX	
PR	07-MAR-2003; 2003US-0452682P.
PR	12-MAR-2003; 2003US-0454265P.
PR	13-MAR-2003; 2003US-0454982P.
PR	13-MAR-2003; 2003US-0455050P.
PR	14-APR-2003; 2003US-0462894P.
PR	17-APR-2003; 2003US-0463772P.
PR	25-APR-2003; 2003US-0465665P.
PR	25-APR-2003; 2003US-0465802P.
PR	09-MAY-2003; 2003US-0469612P.
PR	08-AUG-2003; 2003US-0493986P.
PR	11-AUG-2003; 2003US-0494597P.
PR	26-SEP-2003; 2003US-0506341P.
PR	09-OCT-2003; 2003US-0510246P.
PR	10-OCT-2003; 2003US-0510318P.
PR	07-NOV-2003; 2003US-0518453P.
XX	
PA	(ALNY-) ALNYLAM PHARM.
XX	
PI	Manoharan M, Bumcrot D;
XX	
XX	WPI; 2004-677362/66.
DR	
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery
PT	disease, diabetes, cancer or neurological disease, comprises sense
PT	sequence and antisense sequence which has specific modifications.
XX	
PS	Example 5; SEQ ID NO 2038; 378pp; English.
XX	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a
CC	sense sequence and an antisense sequence, where the sense sequences have
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense
CC	sequences have one or more asymmetrical phosphorothioate modifications
CC	and the antisense sequence targets a human gene sequence. Also described
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);
CC	stabilising (I), involves selecting a sequence with activity and
CC	introducing one or more asymmetrical modification in the sequence, where
CC	the modification decreases nuclease sensitivity while not decreasing its
CC	activity; a kit comprising (I) and instructions for its use; and a device
CC	that can be dispense or administer a composition comprising (I). (I) is
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC	The subject is suffering from a disorder characterised by elevated or
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,
CC	dyslipidemias, hypercholesterolaemia, statin-resistant
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC	inhibit hepatic glucose production or for treating glucose-metabolism-
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC	lung cancer), neurological disease (e.g., Huntington disease or
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

```
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4472 CTCAAAAGGTTTACTAATA 4490
       |||||
Db       1 CTCAAAAGGTTTACTAATA 19

RESULT 1595
ADR78153
ID ADR78153 standard; DNA; 19 BP.
AC
AC ADR78153;
XX
XX
DT 16-DEC-2004 (first entry)
DE
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2638.
KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
```

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1747 ACCAGGAGGTTCTTTCTCA 1765  
 Db 1 ACCAGGAGGTTCTTTCTCA 19  
 |||||

RESULT 1596  
 ADR78159  
 ID ADR78159 standard; DNA; 19 BP.  
 AC ADR78159;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2644.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 2644; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 289 AACACTATGAGGCTGAGAG 307  
 Db 1 AACACTATGAGGCTGAGAG 19  
 |||||

RESULT 1597  
 ADR78167  
 ID ADR78167 standard; DNA; 19 BP.  
 XX  
 AC ADR78167;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2652.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS  
 XX Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 2652; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical phosphorothioate modifications  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispensed or administered a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 872 ACTGGACGCTAAGAGGAG 890  
 Db 1 ACTGGACGCTAAGAGGAG 19  
 RESULT 1598  
 ADR78170  
 ID ADR78170 standard; DNA; 19 BP.  
 XX  
 AC ADR78170;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2655.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 2655; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical phosphorothioate modifications  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispensed or administered a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1139 CTCTGAGCAAAATATCCAG 1157  
 |||||  
 DB 1 CTCTGAGCAAAATATCCAG 19

RESULT 1599  
 ADR78174  
 ID ADR78174 standard; DNA; 19 BP.  
 AC ADR78174;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2659.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2659; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1296 TGCTCCACTCACATCTCC 1314  
 |||||  
 DB 1 TGCTCCACTCACATCTCC 19

RESULT 1600  
 ADR78230  
 ID ADR78230 standard; DNA; 19 BP.  
 XX  
 AC ADR78230;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2715.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2715; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2418 GATTGAAATCCAAAGAAG 2436  
 Db 1 GATTGAAATCCAAAGAAG 19  
 RESULT 1601  
 ADR78279  
 ID ADR78279 standard; DNA; 19 BP.  
 XX AC ADR78279;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2764.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2764; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 885 AGGAAGCATGTGGCAGAG 903  
 Db 1 AGGAAGCATGTGGCAGAG 19  
 |||||

RESULT 1602  
 ADR78293  
 ID ADR78293 standard; DNA; 19 BP.  
 XX  
 AC ADR78293;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2778.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 2778; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1591 TTCTGCGGTCATTTGAAA 1609  
 Db 1 TTCTGCGGTCATTTGAAA 19  
 |||||

RESULT 1603  
 ADR78299  
 ID ADR78299 standard; DNA; 19 BP.  
 XX  
 AC ADR78299;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2784.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2784; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2004 ACTGTCATGGACTTCAGAA 2022  
 Db 1 ACTGTCATGGACTTCAGAA 19

RESULT 1604  
 ADR78303  
 ID ADR78303 standard; DNA; 19 BP.  
 XX AC ADR78303;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2788.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; as.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2788; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2004 ACTGTCATGGACTTCAGAA 2022  
 Db 1 ACTGTCATGGACTTCAGAA 19

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2167 TTGGATTGCTTCAGCTGA 2185  
 Db 1 TTGGATTGCTTCAGCTGA 19  
 |||||

## RESULT 1605

ID ADR78319 standard; DNA; 19 BP.

XX AC ADR78319;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2804.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2804; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2891 GCTGAAGTTTATCATTCCT 2909

Db 1 GCTGAAGTTTATCATTCCT 19

## RESULT 1606

ADR78325

ID ADR78325 standard; DNA; 19 BP.

XX AC ADR78325;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2810.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.





CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 3966 AAAAGCGATGCCGGGTCA 3984  
 Db 1 AAAAGCGATGCCGGGTCA 19

RESULT 1609  
 ADR78345  
 ID ADR78345 standard; DNA; 19 BP.  
 XX  
 AC ADR78345;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2830.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS  
 CC Example 5; SEQ ID NO 2830; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4385 ACTATCATGTGATGGGTCT 4403  
 Db 1 ACTATCATGTGATGGGTCT 19

RESULT 1609  
 ADR78351  
 ID ADR78351 standard; DNA; 19 BP.  
 XX  
 AC ADR78351;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2836.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-049612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2836; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apob gene expression.  
 XX  
 XX SQ Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 4836 TTAAATCTGACCAATG 4854  
 XX Db 1 TTAAATCTGACCAATG 19  
 XX  
 XX RESULT 1610  
 XX ADR78462  
 XX ID ADR78462 standard; DNA; 19 BP.  
 XX AC ADR78462;  
 XX XX  
 XX DT 16-DEC-2004 (first entry)

XX  
 DE  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2947.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2947; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apob gene expression.  
 XX

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1637 TCCAGAACTCAAGTCTTCA 1655

Db 1 TCCAGAACTCAAGTCTTCA 19

RESULT 1611

AD78496

ID AD78496 standard; DNA; 19 BP.

XX AD78496;

AC AD78496;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2981.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPT; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2981; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 20 GGGCTGAGTGCCCTTCTCG 38

Db 1 GGGCTGAGTGCCCTTCTCG 19

RESULT 1612

AD78497

ID AD78497 standard; DNA; 19 BP.

XX AD78497;

AC AD78497;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2982.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2982; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity, a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 21 GCGTGGTGCCTTCGG 39
Db 1 GCGTGGTGCCTTCGG 19
RESULT 1613
ADR78500
ID ADR78500 standard; DNA; 19 BP.
XX
AC ADR78500;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2985.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

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KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2985; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity, a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 91 CAGCCGAGCCAGGAGC 109  
 Db 1 CAGCCGAGCCAGGAGC 19  
 |||||

RESULT 1614  
 ADR78536  
 ID ADR78536 standard; DNA; 19 BP.  
 XX AC ADR78536;  
 XX DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3021.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-049612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3021; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1012 ACAGCCGCTCTTTGGTGA 1030  
 Db 1 ACAGCCGCTCTTTGGTGA 19  
 |||||

RESULT 1615  
 ADR78575  
 ID ADR78575 standard; DNA; 19 BP.  
 XX AC ADR78575;  
 XX DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3060.  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-049612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3021; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3060; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 2 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1940 AGAATTGGATATCCAAAGAT 1958  
 Db 1 AGAATTGGATATCCAAAGAT 19  
 RESULT 1616  
 ADR78592  
 ID ADR78592 standard; DNA; 19 BP.  
 XX  
 AC ADR78592;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3077.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 12-MAR-2003; 2003US-0452682P.  
 PR 17-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3077; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 1 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2193 GAGATTGGCTTGGAGGAA 2211  
 Db 1 GAGATTGGCTTGGAGGAA 19

RESULT 1617  
 ADR78626  
 ID ADR78626 standard; DNA; 19 BP.  
 AC ADR78626;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3111.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3111; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3124 CCAGATTAGAGCTGGAAC 3142  
 Db 1 CCAGATTAGAGCTGGAAC 19

RESULT 1618  
 ADR78659  
 ID ADR78659 standard; DNA; 19 BP.  
 AC ADR78659;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3144.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3111; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3144; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4004 CAGTTTGAAAATTGAGATT 4022
Db |||||
1 CAGTTTGAAAATTGAGATT 19
RESULT 1619
ADR78662
ID ADR78662 standard; DNA; 19 BP.
XX
AC ADR78662;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3147.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
PA Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3147; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4046 CTCCAGATCTAAAGATG 4064

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Db      1  ||||| 1CTCCAGAGATCTAAGATG 19
RESULT 1620
ADR78667
ID      ADR78667 standard; DNA; 19 BP.
XX
AC      ADR78667;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3152.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 3152; 379pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instructions for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

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CC      is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC      The subject is suffering from a disorder characterised by elevated or
CC      otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC      levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC      disorder is chosen from the HDL/LDL cholesterol imbalance,
CC      dyslipidaemias, hypercholesterolaemia, statin-resistant
CC      hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC      disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC      inhibit hepatic glucose production or for treating glucose-metabolism-
CC      related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC      treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC      lung cancer), neurological disease (e.g., Huntington disease or
CC      spinocerebellar ataxia) or viral disease (e.g. AIDS). This sequence
CC      represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC      can be used to control ApoB gene expression.
XX
SQ      Sequence 19 BP; 4 A; 6 C; 1 G; 8 T; 0 U; 0 Other;
      Query Match      0.18; Score 19; DB 1; Length 19;
      Best Local Similarity 100.0%; Pred. NO. 6e+02;
      Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
      Qy      4136 AGTCCTACTTTTACCATT 4154
      Db      1 AGTCCTACTTTTACCATT 19
RESULT 1621
ADR78685
ID      ADR78685 standard; DNA; 19 BP.
XX
AC      ADR78685;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 3170.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNY-) ALNYLAM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
WPI; 2004-677362/66.
XX
DR      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.
XX
PS      Example 5; SEQ ID NO 3152; 379pp; English.
XX
CC      The invention describes a RNA interference (iRNA) agent (I) comprising a
CC      sense sequence and an antisense sequence, where the sense sequences have
CC      one or more asymmetrical 2'-O alkyl modifications, the antisense
CC      sequences have one or more asymmetrical phosphorothioate modifications
CC      and the antisense sequence targets a human gene sequence. Also described
CC      are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC      levels or glucose-6-phosphatase levels in a subject; producing (I);
CC      stabilising (I), involves selecting a sequence with activity and
CC      introducing one or more asymmetrical modification in the sequence, where
CC      the modification decreases nuclease sensitivity while not decreasing its
CC      activity; a kit comprising (I) and instructions for its use; and a device
CC      that can be dispense or administer a composition comprising (I). (I) is
CC      useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

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RESULT 1623  
 ID ADR78882 standard; DNA; 19 BP.  
 XX AC ADR78882;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3367.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-APR-2003; 2003US-0455050P.  
 XX PR 17-APR-2003; 2003US-0462894P.  
 XX PR 25-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 09-MAY-2003; 2003US-0465802P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3367; 379pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 5 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1585 ATTGATTCGCGGTCAT 1603  
 Db 1 ATTGATTCGCGGTCAT 19  
 RESULT 1624  
 ADR78900  
 ID ADR78900 standard; DNA; 19 BP.  
 XX AC ADR78900;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3385.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 14-APR-2003; 2003US-0455050P.  
 XX PR 17-APR-2003; 2003US-0462894P.  
 XX PR 25-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 09-MAY-2003; 2003US-0465802P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3367; 379pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3385; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4114 ATCTGCCATCTCGAGAGTT 4132

DB 1 ATCTGCCATCTCGAGAGTT 19

RESULT 1625

ID ADR78925

AD ADR78925 standard; DNA; 19 BP.

AC ADR78925;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3410.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-MAR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 29-APR-2003; 2003US-0465655P.

PR 03-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510245P.

PR 07-NOV-2003; 2003US-0510318P.

PA (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3410; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 210 GAAGAGGAATGCTGGAAA 228

DB 1 GAAGAGGAATGCTGGAAA 19

RESULT 1626

ID ADR78946

AD ADR78946 standard; DNA; 19 BP.

XX

AC ADR78946;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3431.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3431; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 517 AGCTCAAGCTGGCCATTCC 535  
 Db 1 AGCTCAAGCTGGCCATTCC 19  
 RESULT 1627  
 ADR78947  
 ID ADR78947 standard; DNA; 19 BP.  
 XX  
 XX ADR78947;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3432.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3431; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 3432; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 536 AGAAGGGAGCAGGTTTTC 554
Db 1 AGAAGGGAGCAGGTTTTC 19

RESULT 1628
ADR78957
ID ADR78957 standard; DNA; 19 BP.
AC ADR78957;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3442.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
PS
XX Example 5; SEQ ID NO 3442; 378pp; English.
CC
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 639 GAAGAAGCCAGCAAGTGT 657
Db 1 GAAGAAGCCAGCAAGTGT 19

RESULT 1629
ADR78972
ID ADR78972 standard; DNA; 19 BP.
XX
XX ADR78972;
XX
XX 16-DEC-2004 (first entry)
XX
XX

```

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3457.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3457; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 |||||  
 QY 833 GTCAACTCTGATCAGCAGC 851  
 |||||  
 Db 1 GTCAACTCTGATCAGCAGC 19  
 RESULT 1630  
 ADR78995  
 ID ADR78995 standard; DNA; 19 BP.  
 XX  
 XX ADR78995;  
 AC  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3480.  
 DE  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3480; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1208 TGAAGCAGTCACATCTCTC 1226  
|||||||  
Db 1 TGAAGCAGTCACATCTCTC 19

RESULT 1631

AD79006

ID AD79006 standard; DNA; 19 BP.

AC AD79006;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3491.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3491; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 5 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1488 AAGACAAACCTCAGGGA 1506

Db 1 AAGACAAACCTCAGGGA 19

RESULT 1632

AD79009

ID AD79009 standard; DNA; 19 BP.

XX AD79009;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3494.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; lung cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3494; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease, or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1515 CTGCTGGACATTGCTAATT 1533

Db 1 CTGCTGGACATTGCTAATT 19

RESULT 1633

ADR79013

ID ADR79013 standard; DNA; 19 BP.

XX AC ADR79013;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3498.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3498; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease, or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease) or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1619 AACCATGGAGCAGTTAACT 1637

Db 1 AACCATGGAGCAGTTAACT 19

RESULT 1634

ADR79025

ID ADR79025 standard; DNA; 19 BP.

XX ADR79025;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3510.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

PT Example 5; SEQ ID NO 3510; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease) or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 5 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1760 TCCTCAGACTTCTCTGAT 1778

Db 1 TCCTCAGACTTCTCTGAT 19

RESULT 1635

ADR79038

ID ADR79038 standard; DNA; 19 BP.

XX ADR79038;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3523.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3523; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1910 TTCCCATATTGCCAATATC 1928  
 Db 1 TTCCCATATTGCCAATATC 19  
 RESULT 1636  
 ADR79039  
 ID ADR79039 standard; DNA; 19 BP.  
 XX  
 AC ADR79039;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3524.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3524; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1911 TCCCATATTGCCAATATCT 1929  
 Db 1 TCCCATATTGCCAATATCT 19

RESULT 1637

ADR79043  
 ID ADR79043 standard; DNA; 19 BP.

XX  
 AC ADR79043;

XX  
 DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3528.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 29-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3528; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1959 CTGAAAAGTTAGTGAAG 1977

Db 1 CTGAAAAGTTAGTGAAG 19

RESULT 1638

ADR79067

ID ADR79067 standard; DNA; 19 BP.

XX  
 AC ADR79067;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3552.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3552; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 1 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2367 GAGCAGGATATGCTAAATG 2385  
 |||||||

Db 1 GAGCAGGATATGCTAAATG 19  
 RESULT 1639  
 ADR79085  
 ID ADR79085 standard; DNA; 19 BP.  
 XX ADR79085;  
 AC ADR79085;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3570.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cysostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3570; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 1 C; 7 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2367 GAGCAGGATATGCTAAATG 2385  
 |||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 2489 CAGTCTCCATGACCTCCAG 2507  
 |||||  
 Db 1 CAGTCTCCATGACCTCCAG 19

RESULT 1640

ADR79109

ID ADR79109 standard; DNA; 19 BP.

XX ADR79109;

AC ADR79109;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3594.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

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XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 DR disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3594; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2949 ACATTACATTTGGTCTCTA 2967

|||||

Db 1 ACATTACATTTGGTCTCTA 19

RESULT 1641

ADR79120

ID ADR79120 standard; DNA; 19 BP.

XX ADR79120;

AC ADR79120;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3605.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX

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PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3605; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3232 TTGTAACACAGCAGG 3250  
 |||||  
 Db 1 TTGTAACACAGCAGG 19  
 RESULT 1642

ADR79129  
 ID ADR79129 standard; DNA; 19 BP.  
 XX  
 AC ADR79129;  
 DT  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3614.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3614; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3400 GACTCACCTGGACATTCA 3418  
 Db 1 GACTCACCTGGACATTCA 19

RESULT 1643

ADR79130

ID ADR79130 standard; DNA; 19 BP.

XX

AC ADR79130;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3615.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX

WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452882P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

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disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3615; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3408 CTGGACATTCAGACACAGA 3426

Db 1 CTGGACATTCAGACACAGA 19

RESULT 1644

ADR79136

ID ADR79136 standard; DNA; 19 BP.

XX

AC ADR79136;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3621.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

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Interference RNA agent useful for treating dyslipidemias, coronary artery

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3621; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels, (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 12 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3473 GGAAGAGAGAAAAATCAAG 3491
XX |||||
XX Db 1 GGAAGAGAGAAAAATCAAG 19
XX
XX RESULT 1645
XX ADR79160
XX ID ADR79160 standard; DNA; 19 BP.
XX
XX ADR79160;

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XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3645.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;
XX cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3645; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels, (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 12 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3473 GGAAGAGAGAAAAATCAAG 3491
XX |||||
XX Db 1 GGAAGAGAGAAAAATCAAG 19
XX
XX RESULT 1645
XX ADR79160
XX ID ADR79160 standard; DNA; 19 BP.
XX
XX ADR79160;

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4005 AGTTGAAAATGAGATTC 4023  
 |||||  
 Db 1 AGTTTGAATAATGAGATTC 19

RESULT 1646  
 ADR79195  
 ID ADR79195 standard; DNA; 19 BP.

XX  
 AC ADR79195;  
 DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3680.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3680; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4598 CAGAGTCTCTTCGTTCTAT 4616

Db 1 CAGAGTCTCTTCGTTCTAT 19

RESULT 1647

ADR79472

ID ADR79472 standard; DNA; 19 BP.

XX

AC ADR79472;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3964.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3964; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4018 AGATTCCTTCCTTCG 4036
Db 1 AGATTCCTTCCTTCG 19
RESULT 1648
ID R79829
ID AD79829 standard; DNA; 19 BP.
XX
XX AC AD79829;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4323.

```

```

XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4323; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4018 AGATTCCTTCCTTCG 4036
Db 1 AGATTCCTTCCTTCG 19
RESULT 1648
ID R79829
ID AD79829 standard; DNA; 19 BP.
XX
XX AC AD79829;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4323.

```

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 386 GCTCTGCAGCTTCATCTG 404

Db 1 GCTCTGCAGCTTCATCTG 19

RESULT 1649

ADR80265

ID ADR80265 standard; DNA; 19 BP.

XX ADR80265;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4762.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4762; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1549 TTCAGATGACTGCACTGG 1567

Db 1 TTCAGATGACTGCACTGG 19

RESULT 1650

ADR80272

ID ADR80272 standard; DNA; 19 BP.

XX ADR80272;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4769.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-045986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4769; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3014 CTGGTCAGTTGCAAGCAA 3032  
 Db 1 CTGGTCAGTTGCAAGCAA 19  
 RESULT 1651  
 ADR80278  
 ID ADR80278 standard; DNA; 19 BP.  
 XX  
 XX ADR80278;  
 AC  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4775.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-04659612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4775; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;  
 SQ

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4862 TAAGAACTTTGCCACTTCT 4880
    |||||
Db 1 TAAGAACTTTGCCACTTCT 19

RESULT 1652
ADR80336
ID ADR80336 standard; DNA; 19 BP.
AC ADR80336;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4833.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4833; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

```

```

CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

```

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 4670 CAATGGAGAGTCCACCTG 4688
    |||||
Db 1 CAATGGAGAGTCCACCTG 19

```

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RESULT 1653
ADR80417

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```
ID ADR80417 standard; DNA; 19 BP.
XX
AC ADR80417;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4914.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4914; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 3524 AGCCAGAGTGTGAGATCCTC 3542
Db 1 AGCCAGAGTGTGAGATCCTC 19
XX
RESULT 1654
ADR80477
XX ID ADR80477 standard; DNA; 19 BP.
XX
XX ADR80477;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4974.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

```

```

KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4974; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 3746 GTATGCTAATAGACTCCTG 3764  
 DB 1 GTATGCTAATAGACTCCTG 19

RESULT 1655  
 ADR75523  
 ID ADR75523 standard; DNA; 19 BP.  
 AC ADR75523;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 8.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 28-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 8; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1099 CTGTTTGAAGACTCTCCA 1117  
 DB 1 CTGTTTGAAGACTCTCCA 19

RESULT 1656  
 ADR75526  
 ID ADR75526 standard; DNA; 19 BP.  
 AC ADR75526;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 11.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX  
 XX 14-APR-2003; 2003US-0462894P.  
 XX  
 XX 17-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 28-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 8; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 11; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3638 TCAGAGAGATTGTAATTT 3656  
 DB 1 TCAGAGAGAGATTGTAATTT 19  
 RESULT 1657  
 ADR75570  
 ID ADR75570 standard; DNA; 19 BP.  
 AC ADR75570;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 55.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.

XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454285P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 55; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3638 TCAGAGAGATTGTAATTT 3656  
 DB 1 TCAGAGAGAGATTGTAATTT 19  
 RESULT 1657  
 ADR75570  
 ID ADR75570 standard; DNA; 19 BP.  
 AC ADR75570;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 55.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.

XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2621 CATGAGAGATCCCTTTGAA 2639  
 DB 1 CATGAGAGATCCCTTTGAA 19

RESULT 1658  
 ADR75581  
 ID ADR75581 standard; DNA; 19 BP.  
 XX  
 AC ADR75581;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 66.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 66; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; reducing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 2 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4562 TTTGTTGTCAAAGAGTC 4580  
 Db 1 TTTGTTGTCAAAGAGTC 19

RESULT 1659

ADR75614

ID ADR75614 standard; DNA; 19 BP.

XX

AC ADR75614;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 99.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX OS

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454285P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery

XX PT disease, diabetes, cancer or neurological disease, comprises sense

XX PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 66; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a

XX CC sense sequence and an antisense sequence, where the sense sequences have

XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense

XX CC sequences have one or more asymmetrical phosphorothioate modifications

XX CC and the antisense sequence targets a human gene sequence. Also described

XX CC are: a pharmaceutical preparation targets a human gene sequence. Also described

XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);

XX CC stabilising (I); involves selecting a sequence with activity and

XX CC introducing one or more asymmetrical modification in the sequence, where

XX CC the modification decreases nuclease sensitivity while not decreasing its

XX CC activity; a kit comprising (I) and instructions for its use; and a device

XX CC that can be dispense or administer a composition comprising (I). (I) is

XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

XX CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 99; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphate levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1008 ATCAACAGCCGCTCTTTG 1026
Db 1 ATCAACAGCCGCTCTTTG 19
RESULT 1660
AD75651
ID AD75651 standard; DNA; 19 BP.
XX AC AD75651;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 136.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.

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XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 136; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphate levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 394 GCTTCATCCTGAGACCAG 412
Db 1 GCTTCATCCTGAGACCAG 19
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 394 GCTTCATCCTGAGACCAG 412
Db 1 GCTTCATCCTGAGACCAG 19
RESULT 1661
AD75654

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AD75654 standard; DNA; 19 BP.  
 AD75654;  
 16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 139.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 08-AUG-2003; 2003US-0469612P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 139; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 478 AGAAGCTCTGAGGAGTTTC 496  
 Db 1 AGAAGCTCTGAGGAGTTTC 19  
 RESULT 1662  
 ADR75663  
 ID ADR75663 standard; DNA; 19 BP.  
 XX  
 AC ADR75663;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 148.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 08-AUG-2003; 2003US-0469612P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 139; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 148; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 977 ACAGACTTTGAACTTGAA 995  
 DB 1 ACAGACTTTGAACTTGAA 19

RESULT 1663  
 ADR75664  
 ID ADR75664 standard; DNA; 19 BP.  
 AC ADR75664;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 149.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 149; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1205 TGATGAAGCAGCTCACATCT 1223  
 DB 1 TGATGAAGCAGCTCACATCT 19

RESULT 1664  
 ADR75686  
 ID ADR75686 standard; DNA; 19 BP.  
 XX  
 AC ADR75686;  
 XX

DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 171.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 08-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 171; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 3 A; 2 C; 6 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2229 TTGGAAGCTCTTTTGGGA 2247  
 DB 1 TTGGAAGCTCTTTTGGGA 19  
 RESULT 1665  
 ADR75707  
 ID ADR75707 standard; DNA; 19 BP.  
 XX  
 XX ADR75707;  
 AC  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 192.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 192; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 11 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3412 ACATTTCAGAACAGAAAT 3430

DB 1 ACATTTCAGAACAGAAAT 19

RESULT 1666

ID ADR75711

AD 16-DEC-2004 (first entry)

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB, ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

PT Example 5; SEQ ID NO 196; 378pp; English.

PT The invention describes a RNA interference (iRNA) agent (I) comprising a

PT sense sequence and an antisense sequence, where the sense sequences have

PT one or more asymmetrical 2'-O alkyl modifications, the antisense

PT sequences have one or more asymmetrical phosphorothioate modifications

PT and the antisense sequence targets a human gene sequence. Also described

PT are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

PT levels or glucose-6-phosphatase levels in a subject; producing (I);

PT stabilising (I), involves selecting a sequence with activity and

PT introducing one or more asymmetrical modification in the sequence, where

PT the modification decreases nuclease sensitivity while not decreasing its

PT activity; a kit comprising (I) and instruction for its use; and a device

PT that can be dispense or administer a composition comprising (I). (I) is

PT useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

PT is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

PT The subject is suffering from a disorder characterised by elevated or

PT otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

PT levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT disorder is chosen from the HDL/LDL cholesterol imbalance,

PT dyslipidaemias, hypercholesterolaemia, statin-resistant

PT hypercholesterolaemia, coronary artery disease (CAD), coronary heart

PT disease (CHD) and atherosclerosis. (I) is administered to a subject to

PT inhibit hepatic glucose production or for treating glucose-metabolism-

PT related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

PT treating the diseases as mentioned above, cancer (e.g. breast, colon or

PT lung cancer), neurological disease (e.g., Huntington disease or

PT spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

PT represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

PT can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3640 AAGAGAGAGATTGAATTTCGA 3658

DB 1 AAGAGAGAGATTGAATTTCGA 19

RESULT 1667

AD 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 202.



KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX

Interference RNA agent useful for treating dyslipidemias, coronary artery

disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 202; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control apoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3902 GAAGGAGTTCAACCTCCAG 3920  
 |||||  
 Db 1 GAAGGAGTTCAACCTCCAG 19  
 RESULT 1668  
 ADR75727  
 ID ADR75727 standard; DNA; 19 BP.  
 XX  
 AC ADR75727;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 212.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 212; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4395 ACTATCATGTCATGGGTCT 4403

Db 1 ACTATCATGTCATGGGTCT 19

RESULT 1669

ID ADR75861  
 ID ADR75861 standard; DNA; 19 BP.

XX AC ADR75861;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 346.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 FA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 346; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3413 CATTGAGACAGAAATTT 3431

Db 1 CATTGAGACAGAAATTT 19

RESULT 1670

ADR75885

ID ADR75885 standard; DNA; 19 BP.

XX AC ADR75885;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 370.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0453772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 370; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispensed or administered a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 237 CTGGTCTGTCCAAAAGATG 255  
 |||||  
 DB 1 CTGGTCTGTCCAAAAGATG 19  
 RESULT 1671  
 ADR75893  
 ID ADR75893 standard; DNA; 19 BP.  
 XX  
 AC ADR75893;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 378.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 378; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispensed or administered a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 510 AGGTATGAGCTCAAGCTGG 528  
 |||||  
 Db 1 AGGTATGAGCTCAAGCTGG 19

RESULT 1672  
 ADR75926  
 ID ADR75926 standard; DNA; 19 BP.  
 AC ADR75926;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 411.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 411; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1172 CAATAAGCTGGTACTGAG 1190  
 |||||  
 Db 1 CAATAAGCTGGTACTGAG 19

RESULT 1673  
 ADR75929  
 ID ADR75929 standard; DNA; 19 BP.  
 AC ADR75929;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 414.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;



CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2000 TCCAACTGTCATGGACTTC 2018

Db 1 TCCAACTGTCATGGACTTC 19

RESULT 1675

ADR75966

ID ADR75966 standard; DNA; 19 BP.

XX ADR75966;

CC 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 451.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493988P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 451; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant,  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2062 TTCCATCACTTGACCCAGC 2080

Db 1 TTCCATCACTTGACCCAGC 19

RESULT 1676

ADR75988

ID ADR75988 standard; DNA; 19 BP.

XX ADR75988;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 473.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

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PX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0493986P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 473; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2613 TACATCTTCATGAGAGATG 2631
XX
XX Db 1 TACATCTTCATGAGAGATG 19

```

```

RESULT 1677
ADR76015
ID ADR76015 standard; DNA; 19 BP.
XX
XX AC ADR76015;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 500.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 500; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2613 TACATCTTCATGAGAGATG 2631
XX
XX Db 1 TACATCTTCATGAGAGATG 19

```

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3355 TCCTCAGAGTTAATGATGA 3373  
 |||||  
 Db 1 TCCTCAGAGTTAATGATGA 19

RESULT 1679  
 ADR76028  
 ID ADR76028 standard; DNA; 19 BP.  
 XX  
 AC ADR76028;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 513.  
 XX  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510248P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Buncrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 513; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3621 GTGGCATTGGCATTATGATG 3639  
 |||||  
 Db 1 GTGGCATTGGCATTATGATG 19

RESULT 1679  
 ADR76041  
 ID ADR76041 standard; DNA; 19 BP.  
 XX  
 AC ADR76041;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 526.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 526; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4004 CAGTTTGAAAATTCAGATT 4022
XX |||||
XX Db 1 CAGTTTGAAAATTCAGATT 19
XX
XX RESULT 1680
XX ADR76051
XX ID ADR76051 standard; DNA; 19 BP.

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XX AC ADR76051;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 536.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cystostatic; anticonvulsant; nootropic; muscula; anti-Hiv;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 536; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 4004 CAGTTTGAAAATTCAGATT 4022
XX |||||
XX Db 1 CAGTTTGAAAATTCAGATT 19
XX
XX RESULT 1680
XX ADR76051
XX ID ADR76051 standard; DNA; 19 BP.

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CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4151 CATTCCCAAGTTGTATCAA 4169

Db 1 CATTCCCAAGTTGTATCAA 19

RESULT 1681

ADR76268

ID ADR76268 standard; DNA; 19 BP.

XX ADR76268;

AC ADR76268;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 753.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 753; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1951 TCCAAGATCTCGAAAAGTTT 1969

Db 1 TCCAAGATCTCGAAAAGTTT 19

RESULT 1682

ADR76281

ID ADR76281 standard; DNA; 19 BP.

XX ADR76281;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 766.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 15-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0458022P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 09-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 766; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 2 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3693 ATGACTTCCAAATTCCTG 3711  
 Db 1 ATGACTTCCAAATTCCTG 19  
 RESULT 1693  
 ADR76307  
 ID ADR76307 standard; DNA; 19 Bp.  
 AC ADR76307;  
 XX  
 XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 792.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0469612P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 792; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 210 GAAGAGGAAATGCTGAAA 228

Db 1 GAAGAGGAAATGCTGAAA 19

RESULT 1684

ID ADR76310 standard; DNA; 19 BP.

XX ADR76310;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 795.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493988P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 795; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 307 GTTCAGTGGAGTCCCTGG 325

Db 1 GTTCAGTGGAGTCCCTGG 19

RESULT 1685

AD76311

ID ADR76311 standard; DNA; 19 BP.

XX ADR76311;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 796.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 796; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 326 GACTGCTGATTCCAGAGT 344  
 Db 1 ||||| ||||| ||||| ||||| |||||  
 1 GACTGCTGATTCCAGAGT 19  
 RESULT 1686  
 ADR76380  
 ID ADR76380 standard; DNA; 19 BP.  
 XX  
 AC ADR76380;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 865.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 865; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1225 TCTTGCCACACGCTGATTGA 1243
Db 1 TCTTGCCACACGCTGATTGA 19

RESULT 1687
AD76381
ID ADR76381 standard; DNA; 19 BP.
XX AC ADR76381;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 866.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
XX KW RNA interference; RNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 14-MAR-2003; 2003US-0455050P.
XX PR 17-APR-2003; 2003US-0462894P.
XX PR 25-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery
XX FT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX FS Example 5; SEQ ID NO 866; 378pp; English.
XX CC The invention describes a RNA interference (irna) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1226 CTTGCCACACGCTGATTGAG 1244
Db 1 CTTGCCACACGCTGATTGAG 19

RESULT 1688
AD76399
ID ADR76399 standard; DNA; 19 BP.
XX AC ADR76399;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 884.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
XX KW RNA interference; RNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454285P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.

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PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 884; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 Matches 19; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1673 AAGTACAAAGCCATCACTG 1691  
 |||||  
 Db 1 AAGTACAAAGCCATCACTG 19  
 RESULT 1689  
 ADR76431  
 ID ADR76431 standard; DNA; 19 BP.  
 XX  
 XX ADR76431;  
 AC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 916.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 916; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 9 A; 1 C; 4 G; 5 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 Matches 19; Conservative 0; Indels 0; Indels 0; Gaps 0;  
 QY 1673 AAGTACAAAGCCATCACTG 1691  
 |||||  
 Db 1 AAGTACAAAGCCATCACTG 19  
 RESULT 1689  
 ADR76431  
 ID ADR76431 standard; DNA; 19 BP.  
 XX  
 XX ADR76431;  
 AC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 916.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2089 AAATAGAGGGAATCTTAT 2107  
 Db 1 AAATAGAGGGAATCTTAT 19

RESULT 1690  
 ADR76444  
 ID ADR76444 standard; DNA; 19 BP.  
 XX  
 AC ADR76444;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 929.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-045665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 929; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2236 CTCCTTTTGGGAAGCAAG 2254  
 Db 1 CTCCTTTTGGGAAGCAAG 19

RESULT 1691  
 ADR76482  
 ID ADR76482 standard; DNA; 19 BP.  
 XX  
 AC ADR76482;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 967.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-045665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 929; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 967; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2804 GCAGTCGCTAGAGTGGG 2822
Db 1 GGACTTCGCTAGAGTGGG 19

RESULT 1692
ADR76574
ID ADR76574 standard; DNA; 19 BP.
XX
XX ADR76574;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1059.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1059; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 3068 TTAATCCACGCCAGCTCC 3086

Db 1 TTTATCCAAAGCCAGCTCC 19  
 RESULT 1693  
 ID ADR76772 standard; DNA; 19 BP.  
 XX ADR76772;  
 AC ADR76772;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1257.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 FA (ALNY-) ALNYLAM PHARM.  
 XX  
 FI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1257; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1678 CAAGCCATCACTGATGAT 1696  
 DB 1 CAAGCCATCACTGATGAT 19  
 RESULT 1694  
 ADR76886  
 ID ADR76886 standard; DNA; 19 BP.  
 XX ADR76886;  
 AC ADR76886;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1371.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 FA (ALNY-) ALNYLAM PHARM.  
 XX  
 FI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1257; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

PI Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1371; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4262 CAGCACAGACCAATTCAGC 4280  
Db 1 CAGCACAGACCAATTCAGC 19  
RESULT 1695  
AD76898  
ID AD76898 standard; DNA; 19 BP.  
XX  
XX AD76898;  
XX  
XX 16-DBC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1383.  
DE  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2004080406-A2.  
FN

XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US00707070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1383; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 5 A; 3 C; 5 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2295 AATGGTCAAGTTCCTGATG 2313  
Db 1 AATGGTCAAGTTCCTGATG 19

RESULT 1696  
 ID ADR76951 standard; DNA; 19 BP.  
 AC ADR76951;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1436.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-046986P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1436; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 4 C; 3 G; 2 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Beat Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 Qy 4449 GAAAACTTGGAAACACC 4467  
 Db 1 GAAAACTTGGAAACACC 19  
 XX  
 RESULT 1697  
 ADR77013  
 ID ADR77013 standard; DNA; 19 BP.  
 XX  
 AC ADR77013;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1498.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-046986P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 1436; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 PS Example 5; SEQ ID NO 1498; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3827 AATGAGCTCATGGCTTCAG 3845  
 Db 1 AATGAGCTCATGGCTTCAG 19

RESULT 1698

AD77249  
 ID ADR77249 standard; DNA; 19 BP.  
 XX ADR77249;  
 AC ADR77249;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1734.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1734; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4240 CCTCTACAGTGGTGGCAA 4258  
 Db 1 CCTCTACAGTGGTGGCAA 19

RESULT 1699

AD77308  
 ID ADR77308 standard; DNA; 19 BP.  
 XX

AC ADR77308;  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1793.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465655P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1793; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred.No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2692 CTCCTGGAGCCAGGCTGG 2710  
 Db 1 CTCCTGGAGCCAGGCTGG 19  
 RESULT 1700  
 ADR77347  
 ID ADR77347 standard; DNA; 19 BP.  
 XX  
 XX ADR77347;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1832.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465655P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1793; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

Example 5; SEQ ID NO 1832; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2501 CCTCCAGCTCTGGGAAG 2519

Db 1 CCTCCAGCTCTGGGAAG 19

RESULT 1701

ADR77543

ID ADR77543 standard; DNA; 19 BP.

AC ADR77543;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2028.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2028; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4322 CCTGCTTCTCTACAATGTG 4340

Db 1 CCTGCTTCTCTACAATGTG 19

RESULT 1702

ADR77555

ID ADR77555 standard; DNA; 19 BP.

XX ADR77555;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2040.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX PD WPI; 2004-677362/66.

XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 2040; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 8 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4475 AAAAGGTTTACTAATATTC 4493

|||||||

DB 1 AAAAGGTTTACTAATATTC 19

RESULT 1703

ADR77562

ID ADR77562 standard; DNA; 19 BP.

XX AC ADR77562;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2047.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX PD WPI; 2004-677362/66.

XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 2040; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4624 GCACATATGGCCTCTTG 4642  
|||||  
Db 1 GCACATATGGCCTCTTG 19

RESULT 1704  
AD78158  
ID ADR78158 standard; DNA; 19 BP.  
XX AC ADR78158;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2643.  
XX  
KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US0007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX  
XX 12-MAR-2003; 2003US-0454265P.  
XX  
XX 13-MAR-2003; 2003US-0454862P.  
XX  
XX 13-MAR-2003; 2003US-0455050P.  
XX  
XX 14-APR-2003; 2003US-0462894P.  
XX  
XX 17-APR-2003; 2003US-0463772P.  
XX  
XX 25-APR-2003; 2003US-0465665P.  
XX

25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2643; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 1 A; 8 C; 8 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 139 CGAGGCCCGCGCTGCTGGC 157  
|||||  
Db 1 CGAGGCCCGCGCTGCTGGC 19

RESULT 1705  
ADR78188  
ID ADR78188 standard; DNA; 19 BP.  
XX AC ADR78188;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2673.  
XX  
KW antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2673; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. G+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2621 CATGGAGAAATGCTTTGAA 2639  
 Db 1 CATGGAGAAATGCTTTGAA 19  
 RESULT 1706  
 ADR78265  
 ID ADR78265 standard; DNA; 19 BP.  
 XX  
 AC ADR78265;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2750.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2750; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 2 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 360 TGCAGGTTGAGCTGGAGG 378

Db 1 TGCAGGTTGAGCTGGAGG 19

RESULT 1707

ADNR78276

ID ADNR78276 standard; DNA; 19 BP.

XX AC ADNR78276;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2761.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2761; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 6e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 692 TCACCTTACCGTCAGAGG 710

Db 1 TCACCTTACCGTCAGAGG 19

RESULT 1708

ADNR78297

ID ADNR78297 standard; DNA; 19 BP.

XX AC ADNR78297;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2782.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 15-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 18-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2782; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1888 AGCAAGTGAAGAACTTTGT 1906  
 |||||  
 Db 1 AGCAAGTGAAGAACTTTGT 19  
 |||||  
 RESULT 1709  
 ADR78311  
 ID ADR78311 standard; DNA; 19 BP.  
 XX  
 AC ADR78311;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2796.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2796; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
 XX

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2385 GGAAATAATGCTCAGTGTGG 2403  
 DB 1 GGAAATAATGCTCAGTGTGG 19

RESULT 1710  
 ADR78332  
 ID ADR78332 standard; DNA; 19 BP.  
 XX  
 AC ADR78332;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2817.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PP 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2817; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 XX

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3696 ACTTCAATTTCCTGTGG 3714  
 DB 1 ACTTCAATTTCCTGTGG 19

RESULT 1711  
 ADR78340  
 ID ADR78340 standard; DNA; 19 BP.  
 XX  
 AC ADR78340;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2825.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticoagulant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2825; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4097 CAAGTCTGTGGATTCCAT 4115  
 |||||||||||||||||||

Db 1 CAAGTCTGTGGATTCCAT 19  
 RESULT 1712  
 ADR78346  
 ID ADR78346 standard; DNA; 19 BP.  
 XX ADR78346;  
 AC ADR78346;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2831.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2831; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4097 CAAGTCTGTGGATTCCAT 4115  
 |||||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4514 ACCACAGATGCTGCTTCA 4532

Db 1 ACCACAGATGCTGCTTCA 19

RESULT 1713

ADR78468

ID ADR78468 standard; DNA; 19 BP.

XX AC ADR78468;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2953.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454982P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2953; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 326 GACTGCTGATTCAAGAGT 344

Db 1 GACTGCTGATTCAAGAGT 19

RESULT 1714

ADR78475

ID ADR78475 standard; DNA; 19 BP.

XX AC ADR78475;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2960.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2960; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1638 CCAGAACTCAAGTCTTCAA 1656  
 Db 1 CCAGAACTCAAGTCTTCAA 19  
 RESULT 1715

ADR78515  
 ID ADR78515 standard; DNA; 19 BP.  
 XX  
 AC ADR78515;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3000.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3000; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 3 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 640 AAGAGCCCAAGCAAGTGT 658  
 Db 1 AAGAGCCCAAGCAAGTGT 19

RESULT 1716  
 ADR78516  
 ID ADR78516 standard; DNA; 19 BP.  
 XX ADR78516;  
 AC ADR78516;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3001.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-045802P.  
 PR 08-AUG-2003; 2003US-0459612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3001; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 648 AAGCAAGTGTGTCTCTGG 666  
 Db 1 AAGCAAGTGTGTCTCTGG 19

RESULT 1717  
 ADR78518  
 ID ADR78518 standard; DNA; 19 BP.  
 XX ADR78518;  
 AC ADR78518;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3003.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-045802P.  
 PR 09-MAY-2003; 2003US-045802P.  
 PR 08-AUG-2003; 2003US-0459612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery



CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1342 CCTTCTGATAGATGGT 1360  
 |||||  
 DB 1 CCTTCTGATAGTGGT 19

RESULT 1719  
 ADR78602  
 ID ADR78602 standard; DNA; 19 BP.

XX  
 AC ADR78602;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3087.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0482894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3087; 378pp; English.

XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 6 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2528 GATGGTGCCCGCACTCTG 2546

|||||  
 DB 1 GATGGTGCCCGCACTCTG 19

RESULT 1720

AD78618

ID ADR78618 standard; DNA; 19 BP.

XX  
 AC ADR78618;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3103.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX
XX Manoharan M, Bumcrot D;
PI
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3103; 378pp; English.
PS
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2738 GGCTGAACGTGGTGCAGAA 2756
DB 1 GGCTGAACGTGGTGCAGAA 19
RESULT 1721
AD78629
ID AD78629 standard; DNA; 19 BP.
XX
XX AD78629;
AC
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3114.

```

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3114; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 66+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2738 GGCTGAACGTGGTGCAGAA 2756

DB 1 GGCTGAACGTGGTGCAGAA 19

RESULT 1721

AD78629

ID AD78629 standard; DNA; 19 BP.

XX

XX AD78629;

AC

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3114.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 3307 TGTCAGTGAAGTCCAAAT 3325  
 Db 1 TGTCAGTGAAGTCCAAAT 19

RESULT 1722  
 ADR78635  
 ID ADR78635 standard; DNA; 19 BP.

XX AC ADR78635;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3120.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3120; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3413 CATTCCAGACACAGAAATT 3431

Db 1 CATTCCAGACACAGAAATT 19

RESULT 1723

ADR78639

ID ADR78639 standard; DNA; 19 BP.

XX AC ADR78639;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3124.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3124; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3512 TTTGCAAGCAGAGCCGAGA 3530  
 Db 1 TTTGCAAGCAGAGCCGAGA 19  
 RESULT 1724  
 ADR78677  
 ID ADR78677 standard; DNA; 19 BP.  
 XX  
 AC ADR78677;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3162.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR  
 PR 14-APR-2003; 2003US-0462894P.  
 PR  
 PR 17-APR-2003; 2003US-0463772P.  
 PR  
 PR 25-APR-2003; 2003US-046565P.  
 PR  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3162; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3512 TTTGCAAGCAGAGCCGAGA 3530  
 Db 1 TTTGCAAGCAGAGCCGAGA 19  
 RESULT 1724  
 ADR78677  
 ID ADR78677 standard; DNA; 19 BP.  
 XX  
 AC ADR78677;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3162.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR  
 PR 14-APR-2003; 2003US-0462894P.  
 PR  
 PR 17-APR-2003; 2003US-0463772P.  
 PR  
 PR 25-APR-2003; 2003US-046565P.  
 PR  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3162; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 4654 CTAACACTGCGCGCTCAA 4672
   1 CTAACACTGCGCGCTCAA 19

Db

RESULT 1725
ADR78874
ID ADR78874 standard; DNA; 19 BP.
XX
AC ADR78874;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3359.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
XX
Interference RNA agent useful for treating dyslipidemias, coronary artery
disease, diabetes, cancer or neurological disease, comprises sense
sequence and antisense sequence which has specific modifications.
XX
Example 5; SEQ ID NO 3359; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
levels or glucose-6-phosphatase levels in a subject; producing (I);

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CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 840 CTGATCAGCAGCCAGT 858
   1 CTGATCAGCAGCCAGT 19

Db

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RESULT 1726
ADR78940
ID ADR78940 standard; DNA; 19 BP.
XX
AC ADR78940;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3425.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3425; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 441 TTCAACCTGAGGGCAAAG 459
Db 1 TTCAACCTGAGGGCAAAG 19
XX
RESULT 1727
ADR78950
ID ADR78950 standard; DNA; 19 BP.
XX
AC ADR78950;
XX
DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3435.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 13-MAR-2003; 2003US-0455050P.
XX
XX 14-APR-2003; 2003US-0462894P.
XX
XX 17-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3435; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 585 ATCTGAACATCAAGAGG 603  
 Db 1 ATCTGAACATCAAGAGG 19

RESULT 1728  
 ADR78958  
 ID ADR78958 standard; DNA; 19 BP.  
 XX  
 AC ADR78958;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3443.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3443; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 2 A; 3 C; 5 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 657 TTGTTTCTGGATACCGTGT 675  
 Db 1 TTGTTTCTGGATACCGTGT 19

RESULT 1729  
 ADR78977  
 ID ADR78977 standard; DNA; 19 BP.  
 XX  
 AC ADR78977;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3462.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3443; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

PA	(ALNY-) ALNYLAM PHARM.
XX	
PI	Manoharan M, Bumcrot D;
PX	WPI; 2004-677362/66.
DR	
XX	
XX	Interference RNA agent useful for treating dyslipidemias, coronary artery
PT	disease, diabetes, cancer or neurological disease, comprises sense
PT	sequence and antisense sequence which has specific modifications.
XX	
PS	Example 5; SEQ ID NO 3462; 378pp; English.
PX	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a
CC	sense sequence and an antisense sequence, where the sense sequences have
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense
CC	sequences have one or more asymmetrical phosphorothioate modifications
CC	and the antisense sequence targets a human gene sequence. Also described
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);
CC	stabilising (I), involves selecting a sequence with activity and
CC	introducing one or more asymmetrical modification while not decreasing its
CC	the modification decreases nuclease sensitivity while not decreasing its
CC	activity; a kit comprising (I) and instruction for its use; and a device
CC	that can be dispense or administer a composition comprising (I). (I) is
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC	The subject is suffering from a disorder characterised by elevated or
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC	inhibit hepatic glucose production or for treating glucose-metabolism-
CC	related disorder e.g. diabetes or type-2 diabetes (I) is useful for
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC	lung cancer), neurological disease (e.g., Huntington disease or
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC	can be used to control ApoB gene expression.
XX	
SQ	Sequence 19 BP; 3 A; 8 C; 1 G; 7 T; 0 U; 0 Other;
	Query Match 0.1%; Score 19; DB 1; Length 19;
	Best Local Similarity 100.0%; Pred. No. 6e+02;
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	919 AACACCTCTTCTGCGCTTT 937
DB	1 AACACCTCTTCTGCGCTTT 19
RESULT 1730	
ADR78982	
ID	ADR78982 standard; DNA; 19 BP.
AC	
ADP78982;	
XX	
DT	16-DEC-2004 (first entry)
XX	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 3467.
XX	
KW	antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW	cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW	RNA interference; iRNA; antisense technology; lipid metabolism;
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW	coronary artery disease; CAD; coronary heart disease; CHD;
KW	atherosclerosis; hepatic glucose production;
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW	colon cancer; lung cancer; neurological disease; Huntington disease;
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS	Homo sapiens.

OS Homo sapiens.

RESULT 1731  
 ADR79022  
 ID ADR79022 standard; DNA; 19 BP.  
 XX AC ADR79022;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3507.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX XX WO2004080406-A2.  
 XX XX 23-SEP-2004.  
 XX XX 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 3507; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1741 ACAAGGACCAGGAGGTTCT 1759  
 Db 1 ACAAGGACCAGGAGGTTCT 19  
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## RESULT 1732

ADR79041

ID ADR79041 standard; DNA; 19 BP.

XX AC ADR79041;  
 XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3526.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.

WO2004080406-A2.

XX XX 23-SEP-2004.  
 XX XX 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

XX XX Manoharan M, Bumcrot D;  
 XX PI

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3526; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I);
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1944 TTGGATATCCAGATCTGA 1962
Db 1 TTGGATATCCAGATCTGA 19
RESULT 1733
AD79042
XX AD79042 standard; DNA; 19 BP.
XX
XX AD79042;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3527.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; RNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX W02004080406-A2.
XX
XX 23-SEP-2004.
XX

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3527; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphate levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I);
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1951 TCCAGATCTGAAAAGTT 1969
Db 1 TCCAGATCTGAAAAGTT 19
RESULT 1734
AD79046

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AD R79046 standard; DNA; 19 BP.  
 AD R79046;  
 16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3531.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3531; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2007 GTCATGGACTTCAGAAAAT 2025  
 Db 1 GTCATGGACTTCAGAAAAT 19  
 RESULT 1735  
 AD R79079  
 ID AD R79079 standard; DNA; 19 BP.  
 XX  
 AC AD R79079;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3564.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3531; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 3564; 378pp; English.
PS
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2427 TCCAAAGAAGTCCCGAAG 2445
Db 1 TCCAAAGAAGTCCCGAAG 19

RESULT 1736
ADNR79083
ID ADNR79083 standard; DNA; 19 BP.
XX
AC ADNR79083;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3568.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.
13-MAR-2003; 2003US-0454962P.
13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3568; 378pp; English.
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 2 A; 3 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2474 GGAGCTTGCTTTGCCAGT 2492
Db 1 GGAGCTTGCTTTGCCAGT 19

RESULT 1737
ADNR79091
ID ADNR79091 standard; DNA; 19 BP.
XX
XX ADNR79091;
XX
XX

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DT XX 16-DEC-2004 (first entry)
DE XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3576.
KW XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW XX cytosatic; anticongulant; nootropic; muscular; anti-HIV;
KW XX RNA interference; iRNA; antisense technology; lipid metabolism;
KW XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW XX coronary artery disease; CAD; coronary heart disease; CHD;
KW XX atherosclerosis; hepatic glucose production;
KW XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW XX colon cancer; lung cancer; neurological disease; Huntington disease;
KW XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX OS Homo sapiens.
XX FN WO2004080406-A2.
XX PD 23-SEP-2004.
XX XX 08-MAR-2004; 2004WO-US0007070.
XX PF 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX XX WPI; 2004-677362/66.
XX XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 3576; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

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treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2615 CATCTTCATGAGAGTCC 2633  
|||||  
Db 1 CATCTTCATGAGAGTCC 19

RESULT 1738  
ADR79114  
ID ADR79114 standard; DNA; 19 BP.  
XX AC ADR79114;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3599.  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX KW cytosatic; anticongulant; nootropic; muscular; anti-HIV;  
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
XX KW atherosclerosis; hepatic glucose production;  
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX OS Homo sapiens.  
XX FN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX XX 08-MAR-2004; 2004WO-US0007070.  
XX PF 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462894P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX PA (ALNY-) ALNYLAM PHARM.  
XX PI Manoharan M, Bumcrot D;  
XX XX WPI; 2004-677362/66.  
XX XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 3576; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where  
XX CC the modification decreases nuclease sensitivity while not decreasing its  
XX CC activity; a kit comprising (I) and instruction for its use; and a device  
XX CC that can be dispense or administer a composition comprising (I). (I) is  
XX CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
XX CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
XX CC The subject is suffering from a disorder characterised by elevated or  
XX CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-  
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 62+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3053 CTGCACCTCAGGCGCTTAC 3071  
 Db 1 CTGCACCTCAGGCGCTTAC 19

RESULT 1739  
 ADR79123  
 ID ADR79123 standard; DNA; 19 BP.  
 AC ADR79123;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3608.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3608; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 62+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3244 CAGAAGTGGGAGCAGAC 3262  
 Db 1 CAGAAGTGGGAGCAGAC 19

RESULT 1740  
 ADR79125  
 ID ADR79125 standard; DNA; 19 BP.  
 XX  
 AC ADR79125;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3610.  
 DE



KW	antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW	cystostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW	RNA interference; RNA; antisense technology; lipid metabolism;
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW	coronary artery disease; CAD; coronary heart disease; CHD;
KW	atherosclerosis; hepatic glucose production;
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW	colon cancer; lung cancer; neurological disease; Huntington disease;
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; <i>ss</i> .
OS	Homo sapiens.
XX	
PN	W020004080406-A2.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3610; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4206 ACGAATGCTTACAGCAACT 4224  
 |||||  
 Db 1 ACGAATGCTTACAGCAACT 19

RESULT 1742  
 ADR79178  
 ID ADR79178 standard; DNA; 19 BP.  
 XX  
 AC ADR79178;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3663.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 3663; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4322 CTTGCTTTCTACAAATGTG 4340  
 |||||  
 Db 1 CTTGCTTTCTACAAATGTG 19

RESULT 1743  
 ADR79642  
 ID ADR79642 standard; DNA; 19 BP.  
 XX  
 AC ADR79642;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4136.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 4136; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3699 TCCAAATTTCCCTGTGGATC 3717  
 Db 1 TCCAAATTTCCCTGTGGATC 19

RESULT 1744

ADR79892

ID ADR79892 standard; DNA; 19 BP.

XX

AC ADR79892;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4388.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4388; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 1943 ATTGGATATCCAGATCTG 1961  
 |||||  
 Db 1 ATTGGATATCCAGATCTG 19

RESULT 1745  
 ADR80249  
 ID ADR80249 standard; DNA; 19 BP.  
 XX  
 AC ADR80249;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4746.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4746; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 1235 GCTGATTGAGGTGTCACG 1253  
 |||||  
 Db 1 GCTGATTGAGGTGTCACG 19

RESULT 1746  
 ADR80251  
 ID ADR80251 standard; DNA; 19 BP.  
 XX  
 AC ADR80251;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4748.

XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4748; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 2 A; 10 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1373 GGCCCTGATCCCGAGCCC 1391  
 Db 1 GGCCCTGATCCCGAGCCC 19  
 RESULT 1747  
 ADR80253  
 ID ADR80253 standard; DNA; 19 BP.  
 XX ADR80253;  
 AC ADR80253;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4750.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4750; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 2 A; 10 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;





CC Levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3029 GCAAGCTCTTCTCGGCTG 3047

Db 1 GCAAGCTCTTCTCGGCTG 19

RESULT 1751

ADR80308  
 ID ADR80308 standard; DNA; 19 BP.

XX AC ADR80308;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4805.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticongulvant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4805; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1256 CATCACTTTACAGCCTTG 1274

Db 1 CATCACTTTACAGCCTTG 19

RESULT 1752

ADR80310

ID ADR80310 standard; DNA; 19 BP.

XX AC ADR80310;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4807.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticongulvant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX WPI; 2004-677362/66.



PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4807; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4601 AGTCTCTCGTTCATGCT 4619  
 |||||  
 Db 1 AGTCTCTCGTTCATGCT 19  
 |||||  
 RESULT 1753  
 ADR80426  
 ID ADR80426 standard; DNA; 19 BP.

XX ADR80426;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4923.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0510246P.  
 PR 09-OCT-2003; 2003US-0510318P.  
 PR 10-OCT-2003; 2003US-0518453P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4923; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4601 AGTCTCTCGTTCATGCT 4619  
 |||||  
 Db 1 AGTCTCTCGTTCATGCT 19  
 |||||  
 RESULT 1753  
 ADR80426  
 ID ADR80426 standard; DNA; 19 BP.

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 4116 CTGCCATCTCGAGTTCC 4134  
 |||||  
 Db 1 CTGCCATCTCGAGTTCC 19

RESULT 1754  
 ADR75541  
 ID ADR75541 standard; DNA; 19 BP.  
 AC ADR75541;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 26.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.  
 XX  
 PA  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 26; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 289 ACAACTATGAGCTGAGAG 307  
 |||||  
 Db 1 ACAACTATGAGCTGAGAG 19

RESULT 1755  
 ADR75549  
 ID ADR75549 standard; DNA; 19 BP.  
 AC ADR75549;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 34.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.  
 XX  
 PA  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.



CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 883 AGAGGAAGCATGTGGCAGA 901  
 Db 1 AGAGGAAGCATGTGGCAGA 19  
 RESULT 1757  
 ADR75565  
 ID ADR75565 standard; DNA; 19 BP.  
 XX  
 AC ADR75565;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 50.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 50; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2399 TGTGTGAGAGCTGATTAAA 2417  
 Db 1 TGTGTGAGAGCTGATTAAA 19  
 RESULT 1758  
 ADR75571  
 ID ADR75571 standard; DNA; 19 BP.  
 XX  
 AC ADR75571;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 56.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 50; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 56; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2697 GGAGCCAGGCTGAGTAA 2715  
 Db 1 GGAGCCAGGCTGAGTAA 19  
 RESULT 1759  
 AD75573  
 ID AD75573 standard; DNA; 19 BP.  
 AC AD75573;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 58.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW

KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454365P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 58; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2697 GGAGCCAGGCTGAGTAA 2715  
 Db 1 GGAGCCAGGCTGAGTAA 19  
 RESULT 1759  
 AD75573  
 ID AD75573 standard; DNA; 19 BP.  
 AC AD75573;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 58.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW

```

XX SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3183 ACCTATGAGCTCCAGAG 3201
Db 1 ACCTATGAGCTCCAGAG 19

RESULT 1760
AD75640
ID ADR75640 standard; DNA; 19 BP.
XX
AC ADR75640;
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 125.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 125; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described

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are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 222 CTGGAAAATGTCAGCCTGG 240  
Db 1 CTGGAAAATGTCAGCCTGG 19

RESULT 1761  
AD75670  
ID ADR75670 standard; DNA; 19 BP.  
XX  
AC ADR75670;  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 155.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 11-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 125; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 155; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; reducing (M1) apob-100  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1417 TCAACATGGCGAGGATCA 1435  
 Db 1 TCAACATGGCGAGGATCA 19  
 RESULT 1762  
 ADR75687  
 ID ADR75687 standard; DNA; 19 BP.  
 AC ADR75687;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 172.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 172; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1417 TCAACATGGCGAGGATCA 1435  
 Db 1 TCAACATGGCGAGGATCA 19  
 RESULT 1762  
 ADR75687  
 ID ADR75687 standard; DNA; 19 BP.  
 AC ADR75687;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 172.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2231 GGAAGCTCTTTTGGGAAG 2249  
|||||  
Db 1 GGAAGCTCTTTTGGGAAG 19  
RESULT 1763  
AD75725  
ID AD75725 standard; DNA; 19 BP.  
AC AD75725;  
XX  
XX 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 210.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 14-APR-2003; 2003US-0455050P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 210; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 4260 ACCGACACAGACCATTTCA 4278  
|||||  
Db 1 ACCGACACAGACCATTTCA 19  
RESULT 1764  
AD75737  
ID AD75737 standard; DNA; 19 BP.  
XX  
XX AD75737;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 222.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 14-APR-2003; 2003US-0455050P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 210; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where



PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 222; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4975 CTGGATCACTAAATTCCTCA 4993  
 Db 1 CTGGATCACTAAATTCCTCA 19  
 RESULT 1765  
 ADR75896  
 ID ADR75896 standard; DNA; 19 BP.  
 XX  
 AC ADR75896;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 381.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-045265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 381; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, the dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 619 TCCTGTTCCCTCCAGAC 637

```

Db      1 TCCTGGTTCCCCAGAGAC 19
RESULT 1766
ADRT5923
ID   ADR75923 standard; DNA; 19 BP.
XX
AC   ADR75923;
XX
DT   16-DEC-2004 (first entry)
DE   Human apolipoprotein B (ApoB) oligonucleotide seqid 408.
XX
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW   RNA interference; iRNA; antisense technology; lipid metabolism;
KW   cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW   coronary artery disease; CAD; coronary heart disease; CHD;
KW   atherosclerosis; hepatic glucose production;
KW   glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW   colon cancer; lung cancer; neurological disease; Huntington disease;
KW   spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004080406-A2.
XX
PD   23-SEP-2004.
XX
PF   08-MAR-2004; 2004WO-US0007070.
XX
PR   07-MAR-2003; 2003US-0452682P.
PR   12-MAR-2003; 2003US-0454265P.
PR   13-MAR-2003; 2003US-0454962P.
PR   13-MAR-2003; 2003US-0455050P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   25-APR-2003; 2003US-0465802P.
PR   09-MAY-2003; 2003US-0469612P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510246P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
XX
PA   (ALNY-) ALNYLAM PHARM.
XX
PI   Manoharan M, Bumcrot D;
XX
XX   WPI; 2004-677362/66.
XX
DR   Interference RNA agent useful for treating dyslipidemias, coronary artery
PT   disease, diabetes, cancer or neurological disease, comprises sense
PT   sequence and antisense sequence which has specific modifications.
XX
PS   Example 5; SEQ ID NO 408; 378pp; English.
XX
CC   The invention describes a RNA interference (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequences have
CC   one or more asymmetrical 2'-O alkyl modifications, the antisense
CC   sequences have one or more asymmetrical phosphorothioate modifications
CC   and the antisense sequence targets a human gene sequence. Also described
CC   are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC   levels or glucose-6-phosphatase levels in a subject; producing (I);
CC   stabilising (I), involves selecting a sequence with activity and
CC   introducing one or more asymmetrical modification in the sequence, where
CC   the modification decreases nuclease sensitivity while not decreasing its
CC   activity; a kit comprising (I) and instruction for its use; and a device
CC   that can be dispense or administer a composition comprising (I). (I) is
CC   useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or disregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0;

QY 1122 CTGAAAAAACTAACCATCT 1140  
Db 1 CTGAAAAAACTAACCATCT 19

RESULT 1767  
ADRT5941  
ID ADR75941 standard; DNA; 19 BP.  
XX  
AC ADR75941;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 426.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US0007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 408; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 426; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1558 ACTGCACCTGGGGATGAAGA 1576
DB 1 ACTGCACCTGGGGATGAAGA 19
|||||
RESULT 1768
AD75970
ID AD75970 standard; DNA; 19 BP.
XX
AC AD75970;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 455.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.

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23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454285P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 09-MAY-2003; 2003US-0465802P.  
 08-AUG-2003; 2003US-0469612P.  
 11-AUG-2003; 2003US-0493986P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 455; 378pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.  
 Sequence 19 BP; 6 A; 3 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1558 ACTGCACCTGGGGATGAAGA 1576  
 DB 1 ACTGCACCTGGGGATGAAGA 19  
 |||||  
 RESULT 1768  
 AD75970  
 ID AD75970 standard; DNA; 19 BP.  
 XX  
 AC AD75970;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 455.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
CC dyslipidaemia, hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
XX  
SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2550 GGGATCCCCCAGATGATTG 2568  
Db 1 GGGATCCCCCAGATGATTG 19  
|||||

RESULT 1770  
ADNR76052  
ID ADR76052 standard; DNA; 19 BP.  
XX  
AC ADR76052;  
XX  
XX  
DT 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 537.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; IRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2004080406-A2.  
PN  
XX  
XX 23-SEP-2004.  
PD  
XX  
XX 08-MAR-2004; 2004WO-US0007070.  
PF  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR  
XX 12-MAR-2003; 2003US-0454265P.  
PR  
XX 13-MAR-2003; 2003US-0454962P.  
PR  
XX 13-MAR-2003; 2003US-0455050P.  
PR  
XX 14-APR-2003; 2003US-0462894P.  
PR  
XX 17-APR-2003; 2003US-0463772P.  
PR  
XX 25-APR-2003; 2003US-0465665P.  
PR  
XX 25-APR-2003; 2003US-0465802P.  
PR  
XX 09-MAY-2003; 2003US-0469612P.  
PR  
XX 08-AUG-2003; 2003US-0493986P.  
PR  
XX 11-AUG-2003; 2003US-0494597P.  
PR  
XX 26-SEP-2003; 2003US-0506341P.  
PR  
XX 09-OCT-2003; 2003US-0510246P.  
PR  
XX 10-OCT-2003; 2003US-0510318P.  
PR  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
PA  
XX  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.  
XX  
XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 537; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I) apob-100  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC the subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4294 ACCACATGAAGGCTGACTC 4312

Db 1 ACCACATGAAGGCTGACTC 19

RESULT 1771

ADR76055

ID ADR76055 standard; DNA; 19 BP.

XX ADR76055;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 540.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticovulstant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 540; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC the subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4388 ATCATGTGATGGTCTCTA 4406  
 Db 1 ATCATGTGATGGTCTCTA 19  
 RESULT 1772  
 ADR76060  
 ID ADR76060 standard; DNA; 19 BP.  
 XX





DE Human apolipoprotein B (ApoB) oligonucleotide seqid 788.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 788; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 51 GAGGAGCCGCCGCCAGCCAG 69  
 Db 1 GAGGAGCCGCCGCCAGCCAG 19  
 RESULT 1776  
 ADR76317  
 ID ADR76317 standard; DNA; 19 BP.  
 XX  
 AC ADR76317;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 802.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 788; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 395 CTTTCCTCTGAGACGAGC 413  
|||||  
Db 1 CTTTCCTCTGAGACGAGC 19

RESULT 1777

ADNR76335  
ID ADNR76335 standard; DNA; 19 BP.

AC ADNR76335;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide segid 820.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; RNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454262P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 820; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 591 AACATCAAGAGGGGATCA 609  
|||||  
Db 1 AACATCAAGAGGGGATCA 19

RESULT 1778

ADNR76355

ID ADNR76355 standard; DNA; 19 BP.

AC ADNR76355;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide segid 840.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 840; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 7 A; 3 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 875 GGACGCTAAGAGGAGCAT 893  
 Db 1 GGACGCTAAGAGGAGCAT 19  
 RESULT 1779  
 ADR76369  
 ID ADR76369 standard; DNA; 19 BP.  
 XX  
 AC ADR76369;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 854.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 854; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1056 TTTGAGAGCACCACCAATCCA 1074

Db 1 TTTGAGAGCACCACCAATCCA 19

RESULT 1780

ADR76392

ID ADR76392 standard; DNA; 19 BP.

XX ADR76392;

AC ADR76392;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 877.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; hepatic glucose production;  
 KW atherosclerosis; lung cancer; neurological disease; diabetes; cancer; breast cancer;  
 KW glucose-metabolism-related disorder; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; AIDS; apolipoprotein B; apoB; ss.

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 877; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidaemias, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 6e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX QY 1575 GATTACACCTATTGATTC 1593

XX Db 1 GATTACACCTATTGATTC 19

RESULT 1781

ADR76411

ID ADR76411 standard; DNA; 19 BP.

XX ADR76411;

AC ADR76411;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 896.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 17-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 03-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 PT  
 PT  
 XX Example 5; SEQ ID NO 896; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 CC  
 XX Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1835 TTCACAGGCAGATATTAAAC 1853  
 |||||  
 Db 1 TTCACAGGCAGATATTAAAC 19  
 |||||  
 RESULT 1782  
 ADR76439  
 ID ADR76439 standard; DNA; 19 BP.  
 XX  
 AC ADR76439;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 924.  
 XX  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 PT  
 PT  
 XX Example 5; SEQ ID NO 924; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 CC  
 XX Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0;  
 QY 2214 GCGTTTGACCCACATTGG 2232  
 Db 1 GCGTTTGACCCACATTGG 19  
 RESULT 1783  
 ADR76443  
 ID ADR76443 standard; DNA; 19 BP.  
 XX  
 AC ADR76443;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 928.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0459612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI, 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 928; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0;  
 QY 2230 TGAAGACTCTTTTGGGAA 2248  
 Db 1 TGAAGACTCTTTTGGGAA 19  
 RESULT 1784  
 ADR76457  
 ID ADR76457 standard; DNA; 19 BP.  
 XX  
 AC ADR76457;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 942.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 942; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 8 A; 2 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 ||||||||||||||||||

QY 2411 GATTAAGATTGAAATCC 2429

Db 1 GATTAAGATTGAAATCC 19

RESULT 1785

ADR76464

ID ADR76464 standard; DNA; 19 BP.

XX ADR76464;

AC ADR76464;

XX 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 949.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotostatic; anticonvulsant; nootropic; muscula; anti-Hiv;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 949; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD), coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 3 A; 2 C; 9 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2465 CTTGGGAGAGGAGCTTGGT 2483  
 Db 1 CTTGGGAGAGGAGCTTGGT 19

RESULT 1786

AD76470

ID AD76470 standard; DNA; 19 BP.

AC AD76470;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 955.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nontropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

FA Manoharan M, Bumcrot D;

XX WO2004080406-A2.

PI

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WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 955; 378pp; English.

The invention describes a RNA interference (RNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2571 GAGGTCATCAGGAGGGCT 2589

Db 1 GAGGTCATCAGGAGGGCT 19

RESULT 1787

AD76502

ID AD76502 standard; DNA; 19 BP.

AC AD76502;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 987.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nontropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PN

PI

PD 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US007070.  
PF 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
PA Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 987; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3232 TTCTAACTCAAGCAGAAGG 3250  
Db 1 TTCTAACTCAAGCAGAAGG 19  
RESULT 1788

ADR76507  
ID ADR76507 standard; DNA; 19 BP.  
XX  
AC ADR76507;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 992.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 992; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,



CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3299 TATGACCTTGTCACAGTAA 3317  
 Db 1 TATGACCTTGTCACAGTAA 19  
 RESULT 1789  
 ADR76512  
 ID ADR76512 standard; DNA; 19 BP.  
 XX  
 AC ADR76512;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 997.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 997; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3408 CTGGACATTCAGACACAGA 3426  
 Db 1 CTGGACATTCAGACACAGA 19  
 RESULT 1790  
 ADR76541  
 ID ADR76541 standard; DNA; 19 BP.  
 XX  
 AC ADR76541;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1026.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WFI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1026; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD),  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6ex+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4571 CAAAGAAGTCAAGATTGAT 4589  
 Db 1 CAAAGAAGTCAAGATTGAT 19  
 |||||  
 RESULT 1791  
 ADNR76617  
 ID ADNR76617 standard; DNA; 19 BP.  
 XX  
 AC ADNR76617;

XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1102.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WFI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1102; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD),  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6ex+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4571 CAAAGAAGTCAAGATTGAT 4589  
 Db 1 CAAAGAAGTCAAGATTGAT 19  
 |||||  
 RESULT 1791  
 ADNR76617  
 ID ADNR76617 standard; DNA; 19 BP.  
 XX  
 AC ADNR76617;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4571 CAAAGAAGTCAAGATTGAT 4589  
 |||||  
 Db 1 CAAAGAAGTCAAGATTGAT 19

## RESULT 1792

AD76640  
 ID ADR76640 standard; DNA; 19 BP.

XX AC ADR76640;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1125.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-MAR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0462894P.

XX PR 25-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0485655P.

XX PR 09-MAY-2003; 2003US-0485802P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX XX WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 1125; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3242 AGCAGAGGTGCGAGCAG 3260  
 |||||  
 Db 1 AGCAGAGGTGCGAGCAG 19

## RESULT 1793

AD76822

ID ADR76822 standard; DNA; 19 BP.

XX AC ADR76822;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1307.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX XX 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1307; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2744 ACTGGTGGCAAAACCTCC 2762
DB 1 ACTGGTGGCAAAACCTCC 19
|||||
|||||
|||||
RESULT 1794
ADR76885
ID ADR76885 standard; DNA; 19 BP.
XX
AC ADR76885;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1370.

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XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1370; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2744 ACTGGTGGCAAAACCTCC 2762
DB 1 ACTGGTGGCAAAACCTCC 19
|||||
|||||
|||||
RESULT 1794
ADR76885
ID ADR76885 standard; DNA; 19 BP.
XX
AC ADR76885;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1370.

```

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 386 GCTCTGCAGCTTCATCTG 404

Db 1 GCTCTGCAGCTTCATCTG 19

RESULT 1795

ADRW77357

ID ADRW77357 standard; DNA; 19 BP.

AC ADRW77357;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1842.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0452894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 1842; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4829 GCTGACTTTAAATCTGAC 4847

Db 1 GCTGACTTTAAATCTGAC 19

RESULT 1796

ADRW77463

ID ADRW77463 standard; DNA; 19 BP.

XX ADRW77463;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1948.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1948; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3698 TTCCAATTTCCCTGTGGAT 3716  
 Db 1 TTCCAATTTCCCTGTGGAT 19  
 RESULT 1797  
 ADR77482  
 ID ADR77482 standard; DNA; 19 BP.  
 AC ADR77482;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1967.  
 DE  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO.1967; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3698 TTCCAATTTCCCTGTGGAT 3716  
 Db 1 TTCCAATTTCCCTGTGGAT 19  
 RESULT 1797  
 ADR77482  
 ID ADR77482 standard; DNA; 19 BP.  
 AC ADR77482;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1967.  
 DE  
 DE antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosclastic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4116 CTGCCATCTCGAGATTCC 4134
Db 1 CTGCCATCTCGAGATTCC 19

RESULT 1798
ADRW7512
ID ADRW7512 standard; DNA; 19 BP.
XX
AC ADRW7512;
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1997.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 29-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1997; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apob-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.
Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4225 TGTACAACTGGTCGGCTC 4243
Db 1 TGTACAACTGGTCGGCTC 19

RESULT 1799
ADRW7523
ID ADRW7523 standard; DNA; 19 BP.
XX
XX
AC ADRW7523;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2008.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX
XX WO2004080406-A2.
XX
XX
XX 23-SEP-2004.
XX
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 29-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1997; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
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XX
XX PA (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2008; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3981 GTCAAATATACCTTGAACA 3999
Db 1 GTCAAATATACCTTGAACA 19
XX
RESULT 1800
ADNR77538
ID ADNR77538 standard; DNA; 19 BP.
XX
XX AC ADNR77538;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2023.
XX
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
XX cystostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454562P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 28-APR-2003; 2003US-0465802P.
XX 03-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2023; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 4206 ACGAATCTCTACAGCAACT 4224  
 Db 1 ACGAATCTCTACAGCAACT 19

RESULT 1801  
 ADR77539  
 ID ADR77539 standard; DNA; 19 BP.  
 XX AC ADR77539;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2024.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465912P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 2024; 379pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4242 TCCTACAGTGTGTCGCAACA 4260

Db 1 TCCTACAGTGTGTCGCAACA 19

RESULT 1802

ADR78078

ID ADR78078 standard; DNA; 19 BP.

XX AC ADR78078;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2563.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.  
 XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0465912P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

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PA (ALNY-) ALNYLAM PHARM.
PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2563; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 2477 GCTTGGTTTGGCCAGTCTC 2495
DB |||||
1 GCTTGGTTTGGCCAGTCTC 19

RESULT 1803
AD78140
ID AD78140 standard; DNA; 19 BP.
XX
XX AC AD78140;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2625.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.

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XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2625; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
OY 374 GGAGGTTTCCCCAGTCTGC 392
DB |||||
1 GGAGGTTTCCCCAGTCTGC 19

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RESULT 1804  
 ADR78186  
 ID ADR78186 standard; DNA; 19 BP.  
 XX  
 AC ADR78186;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2671.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2671; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2582 GAAGGGCTCAAGAATGAC 2600  
 |||||  
 Db 1 GAAGGGCTCAAGAATGAC 19

RESULT 1805

ADR78195  
 ID ADR78195 standard; DNA; 19 BP.  
 XX  
 AC ADR78195;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2680.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2671; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
PT
XX Example 5; SEQ ID NO 2680; 378pp; English.
PS
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3636 GATGAGAGAGAGATTGAAT 3654
Db 1 GATGAGAGAGAGATTGAAT 19

RESULT 1806
AD78296
ID AD78296 standard; DNA; 19 BP.
XX
XX AD78296;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2781.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; musclic; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX W02004080406-A2.
XX
XX 23-SEP-2004.

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XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2781; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1886 TGAGCAAGTGAAGACTTT 1904
Db 1 TGAGCAAGTGAAGACTTT 19

RESULT 1807
AD78304

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ID ADR78304 standard; DNA; 19 BP.  
 XX ADR78304;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2789.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0465802P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Mancharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2789; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing, where  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 2 C; 6 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2229 TTGGAAGCTCTTTTGGGA 2247  
 DB 1 TTGGAAGCTCTTTTGGGA 19  
 RESULT 1808  
 ADR78320  
 ID ADR78320 standard; DNA; 19 BP.  
 XX  
 XX ADR78320;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2805.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0465802P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Mancharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2789; 378pp; English.

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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 2805; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2904 ATTCTTCCCAAGAGAC 2922
DB 1 ATTCTTCCCAAGAGAC 19
RESULT 1809
ADR78354
ID ADR78354 standard; DNA; 19 BP.
AC ADR78354;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2839.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2839; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 1 A; 6 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4959 TTCTTCAGCCTGCTTCTG 4977
DB 1 TTCTTCAGCCTGCTTCTG 19
XX
XX RESULT 1810.
XX ADR78543
XX ID ADR78543 standard; DNA; 19 BP.
XX
XX ADR78543;
XX
XX

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DT XX 16-DEC-2004 (first entry)  
DE XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3028.  
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
XX KW atherosclerosis; hepatic glucose production;  
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US0007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 14-APR-2003; 2003US-0455050P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469122P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 28-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 3028; 378pp; English.  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyi modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1142 TGAGCAAAATATCCAGAGA 1160  
DB 1 TGAGCAAAATATCCAGAGA 19  
RESULT 1811  
ADR78559  
ID ADR78559 standard; DNA; 19 BP.  
XX AC ADR78559;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3044.  
XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
XX KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
XX KW atherosclerosis; hepatic glucose production;  
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX 23-SEP-2004.  
XX 08-MAR-2004; 2004WO-US0007070.  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469122P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 3044; 378pp; English.







CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2017 TCAGAAATTTCTCGGAA 2035  
 |||||  
 Db 1 TCAGAAATTTCTCGGAA 19

RESULT 1815  
 AD78595  
 ID AD78595 standard; DNA; 19 BP.  
 AC AD78595;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3080.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT Example 5; SEQ ID NO 3080; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2267 CAGTGTCACAAAGCTTTG 2285  
 |||||  
 Db 1 CAGTGTCACAAAGCTTTG 19

RESULT 1816  
 AD78601  
 ID AD78601 standard; DNA; 19 BP.  
 AC AD78601;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3086.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3086; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 10 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2415 AAAGATTGGAATCCAAAG 2433  
 Db 1 AAAGATTGGAATCCAAAG 19  
 RESULT 1817  
 ADR78664  
 ID ADR78664 standard; DNA; 19 BP.  
 XX  
 XX ADR78664;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3149.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3149; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 2 A; 6 C; 5 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0

QY 4102 CTGTGGATTCCATCTGCC 4120  
|||||  
Db 1 CTGTGGATTCCATCTGCC 19

RESULT 1818  
ADR78673  
ID ADR78673 standard; DNA; 19 BP.  
XX AC ADR78673;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3158.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465565P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/56.  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX Example 5; SEQ ID NO 3158; 378pp; English.  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0

QY 4388 ATCATGTGATGGTCTCTA 4406  
|||||  
Db 1 ATCATGTGATGGTCTCTA 19

RESULT 1819  
ADR78680  
ID ADR78680 standard; DNA; 19 BP.  
XX AC ADR78680;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3165.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465565P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0452682P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3165; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
 SQ Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4660 CTGGCCGGCTCAATGGAGA 4678  
 DB 1 CTGGCCGGCTCAATGGAGA 19  
 RESULT 1820  
 ADR78868  
 ID ADR78868 standard; DNA; 19 BP.  
 XX AC ADR78868;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3353.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cyostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3353; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
 SQ Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC the subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 48 GCTGAGGAGCCGCCGAGC 66  
 |||||  
 DB 1 GCTGAGGAGCCGCCGAGC 19  
 RESULT 1821  
 ADR78873  
 ID ADR78873 standard; DNA; 19 BP.  
 AC ADR78873;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3358.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 05-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3358; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 592 ACATCAAGAGGGGCATCAT 610  
 |||||  
 DB 1 ACATCAAGAGGGGCATCAT 19  
 RESULT 1822  
 ADR78888  
 ID ADR78888 standard; DNA; 19 BP.  
 XX  
 AC ADR78888;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3373.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 08-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3373; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. NO. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2094 GAAGGGAATCTTATATTTG 2112  
 Db 1 GAAGGGAATCTTATATTTG 19

RESULT 1823  
 ADR78898  
 ID ADR78898 standard; DNA; 19 BP.  
 XX AC ADR78898;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3383.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US0007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 08-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3373; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
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 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological diseases (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 6 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3691 AAATGACTTCCCAATTTCCC 3709

Db 1 AAATGACTTCCCAATTTCCC 19

RESULT 1824

ADR78933

ID ADR78933 standard; DNA; 19 BP.

XX AC ADR78933;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3418.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US0007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454362P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 03-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX PA Manoharan M, Bumcrot D;

XX PI WPI; 2004-677362/66.

XX DR

XX

PT Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3418; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX

SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 383 CCAGCTCTGCAGCTTCATC 401

Db 1 CCAGCTCTGCAGCTTCATC 19

RESULT 1825

ADR79018

ID ADR79018 standard; DNA; 19 BP.

XX AC ADR79018;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3503.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX





CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1834 CTTACAGGCAGATATTAA 1852

Db 1 CTTACAGGCAGATATTAA 19

RESULT 1827

ADNR79034

ID ADR79034 standard; DNA; 19 BP.

AC ADR79034;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3519.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW spinocerebellar ataxia; lung cancer; neurological disease; Huntington disease;  
 KW AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3519; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1893 GTGAGAACTTTGTGGCTT 1911

Db 1 GTGAGAACTTTGTGGCTT 19

RESULT 1828

ADNR79057

ID ADR79057 standard; DNA; 19 BP.

AC ADR79057;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3542.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3542; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2214 GGCTTTGAGCAACATGG 2232  
 DB 1 GGCTTTGAGCAACATGG 19  
 |||||  
 RESULT 1829  
 ADR79069  
 ID ADR79069 standard; DNA; 19 BP.  
 XX  
 XX ADR79069;  
 AC  
 XX  
 DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3554.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR  
 XX 13-MAR-2003; 2003US-0454962P.  
 PR  
 XX 13-MAR-2003; 2003US-0455050P.  
 PR  
 XX 14-APR-2003; 2003US-0462894P.  
 PR  
 XX 17-APR-2003; 2003US-0463772P.  
 PR  
 XX 25-APR-2003; 2003US-0465665P.  
 PR  
 XX 25-APR-2003; 2003US-0465802P.  
 PR  
 XX 09-MAY-2003; 2003US-0469612P.  
 PR  
 XX 08-AUG-2003; 2003US-0493986P.  
 PR  
 XX 11-AUG-2003; 2003US-0494597P.  
 PR  
 XX 26-SEP-2003; 2003US-0506341P.  
 PR  
 XX 09-OCT-2003; 2003US-0510246P.  
 PR  
 XX 10-OCT-2003; 2003US-0510318P.  
 PR  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3554; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 2377 TGGTAAATGGAATATGCT 2395  
 DB 1 TGGTAAATGGAATATGCT 19  
 RESULT 1830  
 ADR79076  
 ID ADR79076 standard; DNA; 19 BP.  
 XX  
 AC ADR79076;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3561.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3561; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 2418 GATTTGAATCCAAAGAAG 2436  
 DB 1 GATTTGAATCCAAAGAAG 19.  
 RESULT 1831  
 ADR79081  
 ID ADR79081 standard; DNA; 19 BP.  
 XX  
 AC ADR79081;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3566.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3561; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494537P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3566; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
 QY Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2449 GAGCCTACCTCCGCATCTT 2467  
 Db 1 GAGCCTACCTCCGCATCTT 19  
 |||||  
 RESULT 1832  
 AD79111  
 ID AD79111 standard; DNA; 19 BP.  
 XX  
 XX AC AD79111;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3596.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452582P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494537P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3596; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

```

XX  Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
SQ  Query Match      0.1%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 6e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY  2974 AAACGGAGGTGATCCACC 2992
Db   1 AAACGGAGGTGATCCACC 19

RESULT 1833
AD79113
ID  ADR79113 standard; DNA; 19 BP.
XX
AC  ADR79113;
XX
DT  16-DEC-2004 (first entry)
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 3598.
XX
XX  antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW  cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW  RNA interference; iRNA; antisense technology; lipid metabolism;
KW  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW  coronary artery disease; CAD; coronary heart disease; CHD;
KW  atherosclerosis; hepatic glucose production;
KW  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW  colon cancer; lung cancer; neurological disease; Huntington disease;
KW  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS  Homo sapiens.
XX
PN  WO2004080406-A2.
XX
PD  23-SEP-2004.
XX
PF  08-MAR-2004; 2004WO-US007070.
XX
PR  07-MAR-2003; 2003US-0452682P.
PR  12-MAR-2003; 2003US-0454265P.
PR  13-MAR-2003; 2003US-0454962P.
PR  14-APR-2003; 2003US-0455050P.
PR  17-APR-2003; 2003US-0463772P.
PR  25-APR-2003; 2003US-0465665P.
PR  25-APR-2003; 2003US-0465802P.
PR  09-OCT-2003; 2003US-0510246P.
PR  10-OCT-2003; 2003US-0510318P.
PR  07-NOV-2003; 2003US-0518453P.
XX
PA  (ALNY-) ALNYLAM PHARM.
XX
PI  Manoharan M, Bumcrot D;
XX
DR  WPI; 2004-677362/66.
XX
PT  Interference RNA agent useful for treating dyslipidemias, coronary artery
PT  disease, diabetes, cancer or neurological disease, comprises sense
PT  sequence and antisense sequence which has specific modifications.
XX
PS  Example 5; SEQ ID NO 3598; 378bp; English.
XX
CC  The invention describes a RNA interference (iRNA) agent (I) comprising a
CC  sense sequence and an antisense sequence, where the sense sequences have
CC  one or more asymmetrical 2'-O alkyl modifications, the antisense
CC  sequences have one or more asymmetrical phosphorothioate modifications
CC  and the antisense sequence targets a human gene sequence. Also described

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are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2999 TGAGAACAGGCGAGTCTGG 3017  
Db 1 TGAGAACAGGCGAGTCTGG 19

RESULT 1834  
AD79124  
ID ADR79124 standard; DNA; 19 BP.  
XX  
AC ADR79124;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3609.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3598; 378bp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described



Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3501 TCATACCCCGTTTGAAG 3519  
|||||

Db 1 TCATACCCCGTTTGAAG 19

RESULT 1836  
ADR79168  
ID ADR79168 standard; DNA; 19 BP.

XX  
AC ADR79168;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3653.

XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
OS Homo sapiens.

XX  
PN WO2004080406-A2.

XX  
PD 23-SEP-2004.

XX  
PF 08-MAR-2004; 2004WO-US007070.

XX  
PR 07-MAR-2003; 2003US-0452682P.

XX  
PR 12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.

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PR 14-APR-2003; 2003US-0455050P.

XX  
PR 17-APR-2003; 2003US-0463772P.

XX  
PR 25-APR-2003; 2003US-0465665P.

XX  
PR 28-APR-2003; 2003US-0465802P.

XX  
PR 09-MAY-2003; 2003US-0469612P.

XX  
PR 08-AUG-2003; 2003US-0493986P.

XX  
PR 11-AUG-2003; 2003US-0494597P.

XX  
PR 26-SEP-2003; 2003US-0506341P.

XX  
PR 09-OCT-2003; 2003US-0510246P.

XX  
PR 10-OCT-2003; 2003US-0510318P.

XX  
PR 07-NOV-2003; 2003US-0518453P.

XX  
PA (ALNY-) ALNYLAM PHARM.

XX  
PI Manoharan M, Bumcrot D;

XX  
XX WPI; 2004-677362/66.

XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX  
XX Example 5; SEQ ID NO 3653; 378pp; English.

XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 6 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4152 ATTCCCAAGTTGTATCAAC 4170  
|||||

Db 1 ATTCCCAAGTTGTATCAAC 19

RESULT 1837  
ADR79176  
ID ADR79176 standard; DNA; 19 BP.

XX  
AC ADR79176;  
XX  
DT 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3661.

XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
OS Homo sapiens.

XX  
PN WO2004080406-A2.

XX  
PD 23-SEP-2004.

XX  
PF 08-MAR-2004; 2004WO-US007070.

XX  
PR 07-MAR-2003; 2003US-0452682P.

XX  
PR 12-MAR-2003; 2003US-0454265P.

XX  
PR 13-MAR-2003; 2003US-0454962P.

XX  
PR 14-APR-2003; 2003US-0455050P.

XX  
PR 17-APR-2003; 2003US-0463772P.

XX  
PR 25-APR-2003; 2003US-0465665P.

XX  
PR 28-APR-2003; 2003US-0465802P.

XX  
PR 09-MAY-2003; 2003US-0469612P.

XX  
PR 08-AUG-2003; 2003US-0493986P.

XX  
PR 11-AUG-2003; 2003US-0494597P.

XX  
PR 26-SEP-2003; 2003US-0506341P.

XX  
PR 09-OCT-2003; 2003US-0510246P.

XX  
PR 10-OCT-2003; 2003US-0510318P.

XX  
PR 07-NOV-2003; 2003US-0518453P.

XX  
PA (ALNY-) ALNYLAM PHARM.

XX  
PI Manoharan M, Bumcrot D;

XX  
XX WPI; 2004-677362/66.

XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX  
XX Example 5; SEQ ID NO 3653; 378pp; English.

XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where



PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3661; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4301 GAAGGCTGACTCTGTGGTT 4319  
 Db 1 GAAGGCTGACTCTGTGGTT 19  
 RESULT 1838  
 ID ADR79202  
 AC ADR79202 standard; DNA; 19 BP.  
 XX ADR79202;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3687.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3687; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 4772 TGATCTGCAAGTGGCATC 4790

Db 1 TGAATGCAAGTGGCATC 19  
 |||||  
 RESULT 1839  
 ADR79675  
 ID ADR79675 standard; DNA; 19 BP.  
 XX  
 AC ADR79675;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4169.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4169; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02; 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4300 TGAAGGCTGACTCTGTGGT 4318  
 |||||  
 Db 1 TGAAGGCTGACTCTGTGGT 19  
 RESULT 1840  
 ADR79828  
 ID ADR79828 standard; DNA; 19 BP.  
 XX  
 AC ADR79828;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4322.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4169; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4322; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2178 TCAGTGTACCTCATCGAGA 2196  
 Db 1 TCAGTGTACCTCATCGAGA 19  
 RESULT 1941  
 ADR80274  
 ID ADR80274 standard; DNA; 19 BP.  
 XX  
 AC ADR80274;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4771.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN

XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4771; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1303 CTCACATCTTCAGTGGCT 1321  
 Db 1 CTCACATCTTCAGTGGCT 19

RESULT 1842  
 ADR75542 standard; DNA; 19 BP.  
 XX AC ADR75542;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 27.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 03-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 27; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 Sequence 19 BP; 4 A; 3 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 300 GCTGAGAGTTCAGTGGAG 318  
 DB 1 GCTGAGAGTTCAGTGGAG 19  
 RESULT 1843  
 ADR75568 standard; DNA; 19 BP.  
 XX AC ADR75568;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 53.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 53; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2582 GAAGGGCTCAAGATGAC 2600

DB 1 GAAGGGCTCAAGATGAC 19

RESULT 1844

ID ADR75580

XX ADR75580 standard; DNA; 19 BP.

AC ADR75580;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 65.

XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 65; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4527 GCTTCAGTTCATTGGACT 4545

DB 1 GCTTCAGTTCATTGGACT 19

RESULT 1845

ID ADR75618

XX ADR75618 standard; DNA; 19 BP.

AC ADR75618;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 103.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 103; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Gaps 0;  
 QY 2419 ATTGGAATCCAAAGT 2437  
 |||||  
 DB 1 ATTGGAATCCAAAGT 19  
 |||||  
 RESULT 1846  
 ADR75641  
 ID ADR75641 standard; DNA; 19 BP.  
 XX  
 AC ADR75641;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 126.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-APR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

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PS Example 5; SEQ ID NO 126; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 314 TGGAGTCCCTGGGACTGCT 332
DB 1 TGGAGTCCCTGGGACTGCT 19
RESULT 1847
ADR75674
ID ADR75674 standard; DNA; 19 BP.
XX
AC ADR75674;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 159.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 159; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1520 GGACATTGCTAATTACCTG 1538
DB 1 GGACATTGCTAATTACCTG 19
RESULT 1848
ADR75678
ID ADR75678 standard; DNA; 19 BP.
XX
AC ADR75678;
XX
DT 16-DEC-2004 (first entry)
XX

```

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 163.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 163; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC

XX Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

XX

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0;

QY 1886 TGAGCAAGTGAAGAACTTT 1904

Db 1 TGAGCAAGTGAAGAACTTT 19

RESULT 1849

ADR75715

ID ADR75715 standard; DNA; 19 BP.

XX

AC ADR75715;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 200.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

PI

XX WPI; 2004-677362/66.

DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 163; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3821 AGTTCGAATGAGCTCATGG 3839  
DB 1 AGTTCGAATGAGCTCATGG 19

RESULT 1850  
ADR75844

ID ADR75844 standard; DNA; 19 BP.

AC ADR75844;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 329.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452692P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

14-MAR-2003; 2003US-0455050P.

17-APR-2003; 2003US-0462894P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 329; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1637 TCCAGAACTCAAGTCTTCA 1655  
DB 1 TCCAGAACTCAAGTCTTCA 19

RESULT 1851  
ADR75860

ID ADR75860 standard; DNA; 19 BP.

AC ADR75860;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 345.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 345; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 5 A; 5 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2257 TTTTCCGACAGTGTCAA 2275  
 |||||  
 Db 1 TTTTCCGACAGTGTCAA 19  
 RESULT 1852  
 ADR75865  
 ID ADR75865 standard; DNA; 19 BP.  
 XX  
 AC ADR75865;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 350.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 350; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4422 GATTGGAATATCAAAATTC 4440

Db 1 GATTGGAATATCAAAATTC 19

RESULT 1853

ADR75897

ID ADR75897 standard; DNA; 19 BP.

AC ADR75897;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 382.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 382; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 3 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 640 AAGAGCCCAAGCAAGTGTT 658

Db 1 AAGAGCCCAAGCAAGTGTT 19

RESULT 1854

ADR75901

ID ADR75901 standard; DNA; 19 BP.

AC ADR75901;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 386.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 386; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 711 AGGAAGGCAATGTGGCAA 729  
 |||||  
 Db 1 AGGAAGGCAATGTGGCAA 19  
 RESULT 1855  
 ADR75904  
 ID ADR75904 standard; DNA; 19 BP.  
 XX  
 AC ADR75904;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 389.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 389; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 2 C; 8 G; 2 T; 0 U; 0 Other;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 CC Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 CC  
 CC Query Match 0.1%; Score 19; DB 1; Length 19;  
 CC Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 CC Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 CC  
 CC QY 724 TGGCAACAGAAATATCCAC 742  
 CC Db 1 TGGCAACAGAAATATCCAC 19  
 CC  
 CC RESULT 1856  
 CC ADR75916  
 CC ID ADR75916 standard; DNA; 19 BP.  
 CC XX  
 CC AC ADR75916;  
 CC  
 CC DT 16-DEC-2004 (first entry)  
 CC  
 CC DE Human apolipoprotein B (ApoB) oligonucleotide seqid 401.  
 CC XX  
 CC KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 CC KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 CC KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 CC KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 CC KW coronary artery disease; CAD; coronary heart disease; CHD;  
 CC KW atherosclerosis; hepatic glucose production;  
 CC KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 CC KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 CC KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 CC XX  
 CC OS Homo sapiens.  
 CC XX  
 CC PN WO2004080406-A2.  
 CC XX  
 CC PD 23-SEP-2004.  
 CC XX  
 CC PF 08-MAR-2004; 2004WO-US007070.  
 CC XX  
 CC PR 07-MAR-2003; 2003US-0452682P.  
 CC PR 12-MAR-2003; 2003US-0454265P.  
 CC PR 13-MAR-2003; 2003US-0454962P.  
 CC PR 13-MAR-2003; 2003US-0455050P.  
 CC PR 14-APR-2003; 2003US-0462894P.  
 CC PR 17-APR-2003; 2003US-0463772P.  
 CC PR 25-APR-2003; 2003US-0465665P.  
 CC PR 25-APR-2003; 2003US-0465802P.  
 CC PR 09-MAY-2003; 2003US-0469612P.  
 CC PR 08-AUG-2003; 2003US-0493986P.  
 CC PR 11-AUG-2003; 2003US-0494597P.  
 CC PR 26-SEP-2003; 2003US-0506341P.  
 CC PR 09-OCT-2003; 2003US-0510246P.  
 CC PR 10-OCT-2003; 2003US-0510318P.  
 CC PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 401; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 1007 GATCAACAGCGCTTCTTT 1025  
 XX Db 1 GATCAACAGCGCTTCTTT 19  
 XX  
 XX RESULT 1857  
 XX ADR75917  
 XX ID ADR75917 standard; DNA; 19 BP.  
 XX XX  
 XX AC ADR75917;  
 XX  
 XX DT 16-DEC-2004 (first entry)  
 XX  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 402.  
 XX XX  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 XX KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX KW coronary artery disease; CAD; coronary heart disease; CHD;  
 XX KW atherosclerosis; hepatic glucose production;  
 XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 402; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.4%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1008 ATCAACAGCGCTTCTTTG 1026  
 ||||||||||||||||

Db 1 ATCAACAGCGCTTCTTTG 19  
 RESULT 1858  
 ADR75921  
 ID ADR75921 standard; DNA; 19 BP.  
 XX  
 AC ADR75921;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 406.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 406; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.4%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1008 ATCAACAGCGCTTCTTTG 1026  
 ||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1104 TTGAAGACTCTCCAGAAC 1122  
 Db 1 TTGAAGACTCTCCAGAAC 19

RESULT 1859

ADR75924

ID ADR75924 standard; DNA; 19 BP.

AC ADR75924;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 409.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454982P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-046802P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

DR

XX

PT

PT

PT

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CC

CC

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WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 409; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity, a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 5 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1127 AAACTAACCATCTCTGAG 1145

Db 1 AAACTAACCATCTCTGAG 19

RESULT 1860

ADR75946

ID ADR75946 standard; DNA; 19 BP.

AC ADR75946;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 431.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 431; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1713 CAGGCTCTCGGAAATGG 1731  
 Db |||||  
 1 CAGGCTCTCGGAAATGG 19  
 RESULT 1861

ADR75947  
 ID ADR75947 standard; DNA; 19 BP.  
 XX ADR75947;  
 AC ADR75947;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 432.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 432; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1713 CAGGCTCTCGGAAATGG 1731  
 Db |||||  
 1 CAGGCTCTCGGAAATGG 19  
 RESULT 1861



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1748 CCAGGAGGTTCTTCTTCAG 1766  
 Db 1 CCAGGAGGTTCTTCTTCAG 19  
 RESULT 1862  
 ADR75952  
 ID ADR75952 standard; DNA; 19 BP.  
 AC ADR75952;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 437.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0458022P.  
 PR 09-MAY-2003; 2003US-04696612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 FI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 437; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1900 ACTTTGTGGTTCCTCATAT 1918  
 Db 1 ACTTTGTGGTTCCTCATAT 19

RESULT 1863  
 ADR75971  
 ID ADR75971 standard; DNA; 19 BP.  
 XX  
 AC ADR75971;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 456.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 456; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2127 CTTCTTAAGACAAAGCATGC 2145  
 Db 1 CTTCTTAAGACAAAGCATGC 19  
 |||||  
 RESULT 1864  
 ADR75973  
 ID ADR75973 standard; DNA; 19 BP.  
 XX  
 AC ADR75973;

XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 458.  
 DE  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 458; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2127 CTTCTTAAGACAAAGCATGC 2145  
 Db 1 CTTCTTAAGACAAAGCATGC 19  
 |||||  
 RESULT 1864  
 ADR75973  
 ID ADR75973 standard; DNA; 19 BP.  
 XX  
 AC ADR75973;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 10 A; 2 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2132 TAAAGAAAGCATGCTGAAA 2150  
 |||||  
 DB 1 TAAAGAAAGCATGCTGAAA 19

## RESULT 1865

AD755991  
 ID ADR75991 standard; DNA; 19 BP.

XX AC ADR75991;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 476.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 14-APR-2003; 2003US-0455050P.

XX PR 17-APR-2003; 2003US-0462894P.

XX PR 25-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0465802P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 476; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2634 TTTGAACCTCCCACTGGAG 2652

|||||  
 DB 1 TTTGAACCTCCCACTGGAG 19

## RESULT 1866

AD755996

ID ADR75996 standard; DNA; 19 BP.

XX AC ADR75996;

DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 481.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX PN WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 481; 378pp; English.
XX
CC The invention describes a RNA interference (irRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2662 AGTTGCAAAATATCTTCATC 2680
Db 1 AGTTGCAAAATATCTTCATC 19
RESULT 1867
ADRT6007
ID ADRT6007 standard; DNA; 19 BP.
XX
AC ADRT6007;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 492.

```

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; musclic; anti-HIV; RNA interference; irRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 481; 378pp; English.

The invention describes a RNA interference (irRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e-02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2662 AGTTGCAAAATATCTTCATC 2680

Db 1 AGTTGCAAAATATCTTCATC 19

RESULT 1867

ADRT6007

ID ADRT6007 standard; DNA; 19 BP.

XX

AC ADRT6007;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 492.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 XX Matches 19; Conservative 0;  
 QY 2882 AGCTGGGAGCTGAAGTTT 2900  
 Db 1 AGCTGGGAGCTGAAGTTT 19

## RESULT 1868

ADR76008

ID ADR76008 standard; DNA; 19 BP.

XX ADR76008;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 493.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 493; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3124 CCAGATTAGAGCTGGAAC 3142

Db 1 CCAGATTAGAGCTGGAAC 19

## RESULT 1869

ADR76013

ID ADR76013 standard; DNA; 19 BP.

XX ADR76013;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 498.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 498; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 2 C; 5 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3325 TTCGGATTTTGATGTTGA 3343  
 Db 1 TTCGGATTTTGATGTTGA 19  
 RESULT 1870  
 ADR76014  
 ID ADR76014 standard; DNA; 19 BP.  
 XX  
 AC ADR76014;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 499.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW

cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 499; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 2 C; 5 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3325 TTCGGATTTTGATGTTGA 3343  
 Db 1 TTCGGATTTTGATGTTGA 19  
 RESULT 1870  
 ADR76014  
 ID ADR76014 standard; DNA; 19 BP.  
 XX  
 AC ADR76014;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 499.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3347 CGGAACAATCTCAGAGTT 3365  
 Db 1 CGGAACAATCTCAGAGTT 19

RESULT 1871  
 ADR76018  
 ID ADR76018 standard; DNA; 19 BP.  
 XX AC ADR76018;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 503.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 503; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2',-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3432 ACTGAGTGCCCTCATGG 3450  
 Db 1 ACTGAGTGCCCTCATGG 19

RESULT 1872  
 ADR76258  
 ID ADR76258 standard; DNA; 19 BP.  
 XX AC ADR76258;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 743.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 503; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2',-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 743; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1097 AGCTGTTTGAAGACTCTC 1115
Db 1 AGCTGTTTGAAGACTCTC 19
XX
RESULT 1873
AD76261
ID ADR76261 standard; DNA; 19 BP.
XX
XX ADR76261;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 746.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 746; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 1321 TGAACGCTGTCATGCCAA 1339  
 Dd 1 TGAACGCTGTCATGCCAA 19

RESULT 1874  
 ADR76265  
 ID ADR76265 standard; DNA; 19 BP.  
 AC ADR76265;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 750.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 750; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1637 TCCAGAACTCAAGTCTTCA 1655

Dd 1 TCCAGAACTCAAGTCTTCA 19

RESULT 1875

ADR76315

ID ADR76315 standard; DNA; 19 BP.

AC ADR76315;

XX

XX 16-DEC-2004 (first entry)

DT

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 800.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

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PA (ALNY-) ALNYLAM PHARM.
PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 800; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 383 CCAGCTCTGCAGCTTCATC 401
DB 1 CCAGCTCTGCAGCTTCATC 19
RESULT 1876
AD76331
ID AD76331 standard; DNA; 19 BP.
XX
XX AC AD76331;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 816.
XX
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticongulast; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemiae, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 816; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 565 AGAAGATGAACCTACTTA 583
DB 1 AGAAGATGAACCTACTTA 19

```

RESULT 1877  
 ADR76340  
 ID ADR76340 standard; DNA; 19 BP.  
 AC ADR76340;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 825.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454263P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 825; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase comprising (I); reducing (MI) apoB-100  
 CC stabilising (II), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/IDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SEQ Sequence 19 BP; 2 A; 3 C; 5 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 657 TTGTTTCTGGATACCGTGT 675  
 |||||  
 Db 1 TTGTTTCTGGATACCGTGT 19

RESULT 1878

ADR76344

ID ADR76344 standard; DNA; 19 BP.

AC ADR76344;

XX

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 829.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

PN

XX

XX

PD 23-SEP-2004.

XX

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX

XX 07-MAR-2003; 2003US-0452682P.

PR

12-MAR-2003; 2003US-0454263P.

PR

13-MAR-2003; 2003US-0454962P.

PR

13-MAR-2003; 2003US-0455050P.

PR

14-APR-2003; 2003US-0462894P.

PR

17-APR-2003; 2003US-0463772P.

PR

25-APR-2003; 2003US-0465665P.

PR

25-APR-2003; 2003US-0465802P.

PR

09-MAY-2003; 2003US-0469612P.

PR

08-AUG-2003; 2003US-0493986P.

PR

11-AUG-2003; 2003US-0494597P.

PR

26-SEP-2003; 2003US-0506341P.

PR

09-OCT-2003; 2003US-0510246P.

PR

10-OCT-2003; 2003US-0510318P.

PR

07-NOV-2003; 2003US-0518453P.

PR

(ALNY-) ALNYLAM PHARM.

PA

Manoharan M, Bumcrot D;

PI

XX

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DR WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 829; 378pp; English.
XX
CC The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity, a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 695 CTTTACCGTCAAGACGAGG 713
Db 1 CTTTACCGTCAAGACGAGG 19
RESULT 1879
AD76351
ID AD76351 standard; DNA; 19 BP.
AC
AC AD76351;
XX
XX 16-DEC-2004 (first entry)
DT
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 836.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; RNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX W02004080406-A2.
PN
XX 23-SEP-2004.
PD

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XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 836; 378pp; English.
XX
XX The invention describes a RNA interference (RNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 787 CAGGCATCAGCCCACTGC 805
Db 1 CAGGCATCAGCCCACTGC 19
RESULT 1880
AD76353

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ID ADR76353 standard; DNA; 19 BP.  
 AC ADR76353;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 838.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 838; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 793 TCAGCCCACTTGCTCTCAT 811  
 |||||  
 Db 1 TCAGCCCACTTGCTCTCAT 19

RESULT 1881

ADR76359

ID ADR76359 standard; DNA; 19 BP.

XX

AC ADR76359;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 844.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0462894P.

XX

PR 17-APR-2003; 2003US-0463772P.

XX

PR 25-APR-2003; 2003US-0465665P.

XX

PR 25-APR-2003; 2003US-0465802P.

XX

PR 09-MAY-2003; 2003US-0469612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

XX

PR 09-OCT-2003; 2003US-0510246P.

XX

PR 10-OCT-2003; 2003US-0510318P.

XX

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense

sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 844; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, hypercholesterolaemia, hypercholesterolaemia, statin-resistant disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 AACACCTTCCTGCTTT 937

Db 1 AACACCTTCCTGCTTT 19

RESULT 1882

ADR76406

ID ADR76406 standard; DNA; 19 BP.

XX ADR76406;

AC ADR76406;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 891.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cyostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR

12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469812P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/86.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

PT Example 5; SEQ ID NO 891; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1747 ACCAGAGGTTCTTCTTCA 1765

Db 1 ACCAGAGGTTCTTCTTCA 19

XX RESULT 1883

AD76407

ID ADR76407 standard; DNA; 19 BP.

XX ADR76407;

XX ADR76407;

16-DEC-2004 (first entry)  
Human apolipoprotein B (ApoB) oligonucleotide seqid 892.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1760 TCCTCAGACTTTCCTTGAT 1778  
Db 1 TCCTCAGACTTTCCTTGAT 19

RESULT 1884  
ADR76409  
ID ADR76409 standard; DNA; 19 BP.  
XX  
AC ADR76409;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 894.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX  
XX 12-MAR-2003; 2003US-0454265P.  
XX  
XX 13-MAR-2003; 2003US-0454962P.  
XX  
XX 14-MAR-2003; 2003US-0455050P.  
XX  
XX 17-APR-2003; 2003US-0463772P.  
XX  
XX 25-APR-2003; 2003US-0465665P.  
XX  
XX 25-APR-2003; 2003US-0465802P.  
XX  
XX 09-MAY-2003; 2003US-0469612P.  
XX  
XX 08-AUG-2003; 2003US-0493986P.  
XX  
XX 11-AUG-2003; 2003US-0494597P.  
XX  
XX 26-SEP-2003; 2003US-0506341P.  
XX  
XX 09-OCT-2003; 2003US-0510246P.  
XX  
XX 10-OCT-2003; 2003US-0510318P.  
XX  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Buncrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 892; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
sense sequence and an antisense sequence, where the sense sequences have  
one or more asymmetrical 2'-O alkyl modifications, the antisense  
sequences have one or more asymmetrical phosphorothioate modifications  
and the antisense sequence targets a human gene sequence. Also described  
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
levels or glucose-6-phosphatase levels in a subject; producing (I);  
stabilising (I), involves selecting a sequence with activity and  
introducing one or more asymmetrical modification in the sequence, where  
the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instruction for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 5 C; 2 G; 9 T; 0 U; 0 Other;

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1820 GTTGATGAGGAGTCCTTCA 1838

DB 1 GTTGATGAGGAGTCCTTCA 19  
 |||||

RESULT 1885

ADR76432  
 ID ADR76432 standard; DNA; 19 BP.

XX  
 AC ADR76432;

XX  
 DT 16-DEC-2004 (first entry)

XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 917.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX  
 WN WO2004080406-A2.

XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US0007070.

XX  
 PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 917; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2093 AGAAGGGAATCTTATATTT 2111

DB 1 AGAAGGGAATCTTATATTT 19  
 |||||

RESULT 1886

ADR76434

ID ADR76434 standard; DNA; 19 BP.

XX  
 AC ADR76434;

XX  
 DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 919.



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 919; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 5 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2111 TGATCCAAATAACTACCTT 2129

Db 1 TGATCCAAATAACTACCTT 19

RESULT 1887

ADR76451

ID ADR76451 standard; DNA; 19 BP.

XX

AC ADR76451;

XX

DT 16-DEC-2004 (first entry)

XX

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 936.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

XX (ALNY-) ALNYLAM PHARM.

PA

XX Manoharan M, Bumcrot D;

XX

PI WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

XX Example 5; SEQ ID NO 936; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The

CC subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2377 TGGTAATGGAATGCT 2395

DB 1 TGGTAATGGAATGCT 19

RESULT 1888

AD76485  
 ID AD76485 standard; DNA; 19 BP.

XX AC AD76485;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 970.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS  
 XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US0007070.

XX PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494577P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX PI WPI; 2004-677362/66.

XX DR

XX PT

PT Interference RNA agent useful for treating dyslipidemiae, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 970; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2851 AGTCGGTCTGGAGGCTCA 2869

DB 1 AGTCGGTCTGGAGGCTCA 19

RESULT 1889

AD76486

ID AD76486 standard; DNA; 19 BP.

XX AC AD76486;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 971.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WQ2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 971; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 2 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2853 TCGGGTCTGGAGGCTCATG 2871  
 |||||  
 DB 1 TCGGGTCTGGAGGCTCATG 19  
 RESULT 1890  
 ADR76489  
 ID ADR76489 standard; DNA; 19 BP.  
 XX AC ADR76489;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 974.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WQ2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 974; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 2 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2918 GAGACCAAGTCAAGTGCTC 2936  
 |||||  
 Db 1 GAGACCAAGTCAAGTGCTC 19

RESULT 1891  
 ADR76552  
 ID ADR76552 standard; DNA; 19 BP.  
 AC ADR76552;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1037.  
 XX  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1037; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2908 CTTCCCAAGAGACCAAGT 2926  
 |||||  
 Db 1 CTTCCCAAGAGACCAAGT 19

RESULT 1892  
 ADR76555  
 ID ADR76555 standard; DNA; 19 BP.  
 XX  
 AC ADR76555;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1040.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1040; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1179 CTGCTTACTGAGCTGAGAG 1197  
 Db 1 CTGCTTACTGAGCTGAGAG 19  
 RESULT 1893  
 ADR76639  
 ID ADR76639 standard; DNA; 19 BP.  
 XX AC ADR76639;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1124.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1124; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 10 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3080 CAGCTCCACAGACTCCGCC 3098  
 Db 1 CAGCTCCACAGACTCCGCC 19  
 RESULT 1894  
 ADR76642  
 ID ADR76642 standard; DNA; 19 BP.  
 XX  
 AC ADR76642;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1127.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1127; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 0 G; 11 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2602 TTTTCTTCTCACTACATCTT 2620  
 Db 1 TTTTCTTCTCACTACATCTT 19  
 RESULT 1895  
 ADR76691  
 ID ADR76691 standard; DNA; 19 BP.  
 XX  
 AC ADR76691;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1176.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0508341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1176; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 4894 TGACCTTCTCTAGCAAAA 4912  
 Db 1 TGACCTTCTCTAGCAAAA 19

RESULT 1896  
 ADR76845  
 ID ADR76845 standard; DNA; 19 BP.  
 XX AC ADR76845;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1330.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytosatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0508341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1330; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;  
 SQ

CC Levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3023 TTCCAGCAGGCTTTCTCT 3041

DB 1 TTCCAGCAGGCTTTCTCT 19

# RESULT 1897

AD R76890

ID R76890 standard; DNA; 19 BP.

XX

AC ADR76890;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1375.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX OS

XX WO2004080406-A2.

XX PN

XX 23-SEP-2004.

XX PD

XX 08-MAR-2004; 2004WO-US007070.

XX PF

XX 07-MAR-2003; 2003US-0452682P.

XX PR

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX PA

XX Manoharan M, Bumcrot D;

XX PI

XX WPI; 2004-677362/66.

XX DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1375; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2693 TCCCGAGCGCAGGCTGGA 2711

DB 1 TCCCGAGCGCAGGCTGGA 19

# RESULT 1898

AD R76922

ID ADR76922 standard; DNA; 19 BP.

XX

AC ADR76922;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1407.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX OS

XX WO2004080406-A2.

XX PN

XX 23-SEP-2004.

XX PD



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PF XX 08-MAR-2004; 2004WO-US007070.
PR PR 07-MAR-2003; 2003US-0452682P.
PR PR 12-MAR-2003; 2003US-0454265P.
PR PR 13-MAR-2003; 2003US-0454962P.
PR PR 13-MAR-2003; 2003US-0455050P.
PR PR 14-APR-2003; 2003US-0462894P.
PR PR 17-APR-2003; 2003US-0463772P.
PR PR 25-APR-2003; 2003US-0465665P.
PR PR 25-APR-2003; 2003US-0465802P.
PR PR 08-MAY-2003; 2003US-0469612P.
PR PR 11-AUG-2003; 2003US-0494597P.
PR PR 26-SEP-2003; 2003US-0506341P.
PR PR 09-OCT-2003; 2003US-0510246P.
PR PR 10-OCT-2003; 2003US-0510318P.
PR PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX XX
XX XX Manoharan M, Bumcrot D;
PI PI WPI; 2004-677362/66.
DR DR
XX XX
XX XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT PT disease, diabetes, cancer or neurological disease, comprises sense
PT PT sequence and antisense sequence which has specific modifications.
XX XX
XX XX Example 5; SEQ ID NO 1407; 378pp; English.
XX XX
CC CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC CC sense sequence and an antisense sequence, where the sense sequences have
CC CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC CC sequences have one or more asymmetrical phosphorothioate modifications
CC CC and the antisense sequence targets a human gene sequence. Also described
CC CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC CC stabilising (I), involves selecting a sequence with activity and
CC CC introducing one or more asymmetrical modification in the sequence, where
CC CC the modification decreases nuclease sensitivity while not decreasing its
CC CC activity; a kit comprising (I) and instruction for its use; and a device
CC CC that can be dispense or administer a composition comprising (I). (I) is
CC CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC CC The subject is suffering from a disorder characterised by elevated or
CC CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC CC disease (CAD), coronary artery disease (CAD), coronary heart
CC CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC CC lung cancer), neurological disease (e.g., Huntington disease or
CC CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC CC can be used to control ApoB gene expression.
XX XX
SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2087 CAAATAGAGGGGAATCTT 2105
Db 1 CAAATAGAGGGGAATCTT 19
|||||
RESULT 1899
ADR76926
ID ADR76926 standard; DNA; 19 BP.

```

ADR76926;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 1411.

antiplemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytosolic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

08-MAY-2003; 2003US-0469612P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 1411; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant disease (CAD), coronary heart disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2087 CAAATAGAGGGGAATCTT 2105

Db 1 CAAATAGAGGGGAATCTT 19

|||||

RESULT 1899

ADR76926

ID ADR76926 standard; DNA; 19 BP.

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 4582 AGATTGATGGCAGTTTCAG 4600  
 |||||  
 Db 1 AGATTGATGGCAGTTTCAG 19

RESULT 1900  
 ADR76933  
 ID ADR76933 standard; DNA; 19 BP.  
 XX  
 AC ADR76933;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1418.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PN 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 1418; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;

QY 2179 CAGCTGACCTCATCGAGAT 2197  
 |||||  
 Db 1 CAGCTGACCTCATCGAGAT 19

RESULT 1901  
 ADR77093  
 ID ADR77093 standard; DNA; 19 BP.  
 XX  
 AC ADR77093;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1578.

XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PN 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 1578; 378pp; English.  
 CC  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Qy  
 Db  
 RESULT 1902  
 ADNR77334  
 ID ADNR77334 standard; DNA; 19 BP.  
 XX  
 AC ADNR77334;  
 XX  
 DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1819.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PP  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454362P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 1819; 378pp; English.  
 CC  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Qy  
 Db  
 RESULT 1902  
 ADNR77334  
 ID ADNR77334 standard; DNA; 19 BP.  
 XX  
 AC ADNR77334;  
 XX  
 DT 16-DEC-2004 (first entry)

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4862 TAAGAACTTGCCACTTCT 4880  
 |||||  
 Db 1 TAAGAACTTGCCACTTCT 19

RESULT 1903  
 ADR77468  
 ID ADR77468 standard; DNA; 19 BP.  
 XX  
 AC ADR77468;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1953.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1953; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease. (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2744 ACTGGTGGCAAAACCTCC 2762  
 |||||  
 Db 1 ACTGGTGGCAAAACCTCC 19

RESULT 1904  
 ADR77481  
 ID ADR77481 standard; DNA; 19 BP.  
 XX  
 AC ADR77481;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1966.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1953; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1966; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3069 TACTCCACGCGACTCCA 3087  
 Db 1 TACTCCACGCGACTCCA 19  
 |||||  
 RESULT 1905  
 ADNR77513  
 ID ADNR77513 standard; DNA; 19 BP.  
 XX  
 AC ADNR77513;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1998.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1998; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

```

XX SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4072 CTGTTAGGACACGAGCCCT 4090
Db 1 CTGTTAGGACACGAGCCCT 19

RESULT 1906
ADRT7524
ID ADRT7524 standard; DNA; 19 BP.
AC ADRT7524;
XX
XX DT 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2009.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX WO2004080406-A2.
XX
XX PN 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US0007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 14-APR-2003; 2003US-0455050P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PA Manoharan M, Bumcrot D;
XX
XX PI WPI; 2004-677362/66.
XX
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX PS Example 5; SEQ ID NO 2009; 378pp; English.
XX
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described

```

are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3994 TGAACAAGAACAGTTTGAA 4012  
Db 1 TGAACAAGAACAGTTTGAA 19

RESULT 1907  
ADRT7525  
ID ADRT7525 standard; DNA; 19 BP.  
XX  
XX AC ADRT7525;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2010.  
DE  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
XX OS Homo sapiens.  
XX WO2004080406-A2.  
XX  
XX PN 23-SEP-2004.  
XX  
XX PF 08-MAR-2004; 2004WO-US0007070.  
XX  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 14-APR-2003; 2003US-0455050P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX PA Manoharan M, Bumcrot D;  
XX  
XX PI WPI; 2004-677362/66.  
XX  
XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX  
XX PS Example 5; SEQ ID NO 2009; 378pp; English.  
XX  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2010; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4005 AGTTTGAAAATTGAGATTC 4023  
 DB 1 AGTTTGAAAATTGAGATTC 19  
 RESULT 1908  
 ADNR77531  
 ID ADNR77531 standard; DNA; 19 BP.  
 XX  
 AC ADNR77531;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2016.  
 DE  
 XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2016; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4085 AGCCTCCACTTCAAGTCT 4103  
 |||||  
 Db 1 AGCCTCCACTTCAAGTCT 19

RESULT 1909  
 ADR77551  
 ID ADR77551 standard; DNA; 19 BP.  
 XX  
 AC ADR77551;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2036.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2036; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where

the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 6 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4459 GAAACAACCCAGTCTCAAA 4477  
 |||||  
 Db 1 GAAACAACCCAGTCTCAAA 19

RESULT 1910  
 ADR77966  
 ID ADR77966 standard; DNA; 19 BP.  
 XX  
 AC ADR77966;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2451.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2036; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2451; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3698 TTCCAATTTCCCTGTGGAT 3716
Dx 1 TTCCAATTTCCCTGTGGAT 19
RESULT 1911
ID ADR78111
AC ADR78111 standard; DNA; 19 BP.
AC ADR78111;
XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2596.
DE
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2596; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3028 AGCAAGTCTTCTTGCCCT 3046

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Db      1 AGCAGTCTTCTCGGCT 19
|||||
RESULT 1912
ADR78134
ID ADR78134 standard; DNA; 19 BP.
XX
AC ADR78134;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2619.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
DR
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2619; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity, a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

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is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Length 19;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 527 GGCCATTCAGAGGGAAG 545  
|||||  
DB 1 GGCCATTCAGAGGGAAG 19

RESULT 1913  
ADR78143  
ID ADR78143 standard; DNA; 19 BP.  
XX  
AC ADR78143;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2628.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
DR  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 2619; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity, a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2628; 378pp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2086 CCAAAATAGAGGGGAATCT 2104  
 Db 1 CCAAAATAGAGGGGAATCT 19  
 RESULT 1914  
 ADR78166  
 ID ADR78166 standard; DNA; 19 BP.  
 XX  
 AC ADR78166;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2651.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 PN

XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 2651; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 840 CTGATCAGCAGCCAGT 858  
 Db 1 CTGATCAGCAGCCAGT 19  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

RESULT 1915  
 ADR78171 ID ADR78171 standard; DNA; 19 BP.  
 XX AC  
 XX AC ADR78171;  
 XX DT  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2656.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW KW cytosolic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW KW atherosclerosis; hepatic glucose production;  
 KW KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX PS  
 XX PS Example 5; SEQ ID NO 2656; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1207 ATGAAGCAGTCACATCTCT 1225  
 DB 1 ATGAAGCAGTCACATCTCT 19  
 RESULT 1916  
 ADR78178 ID ADR78178 standard; DNA; 19 BP.  
 XX AC  
 XX AC ADR78178;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2663.  
 KW KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW KW cytosolic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW KW atherosclerosis; hepatic glucose production;  
 KW KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 XX PI WPI; 2004-677362/66.  
 XX DR

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2663; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1921 CCAATATCTTGAACTCAGA 1939

DB 1 CCAATATCTTGAACTCAGA 19

RESULT 1917

ADR78185

ID ADR78185 standard; DNA; 19 BP.

AC ADR78185;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2670.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cystostatic; anticoagulant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2670; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2580 AGGAGGGGCTCAAGAAATG 2598

DB 1 AGGAGGGGCTCAAGAAATG 19

RESULT 1918

ADR78189

ID ADR78189 standard; DNA; 19 BP.

XX

AC ADR78189;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2674.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2674; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0;  
 QY 2697 GGAGCCAAGCTGGAGTAA 2715  
 Db 1 GGAGCCAAGCTGGAGTAA 19  
 RESULT 1919  
 ADR78191  
 ID ADR78191 standard; DNA; 19 BP.  
 XX  
 AC ADR78191;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2676.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2674; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

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PS Example 5; SEQ ID NO 2676; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3183 ACCTATGAGCTCCAGAG 3201
Db |||||
1 ACCTATGAGCTCCAGAG 19
RESULT 1920
ADR78232
ID ADR78232 standard; DNA; 19 BP.
XX
AC ADR78232;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2717.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452692P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 09-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
DR The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1008 ATCAACAGCGCTCTTTG 1026
Db |||||
1 ATCAACAGCGCTCTTTG 19
RESULT 1971
ADR78239
ID ADR78239 standard; DNA; 19 BP.
XX
AC ADR78239;
XX
DT 16-DEC-2004 (first entry)
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2724.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2724; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL-cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2628 AATGCCTTTGAACCTCCCA 2646  
 Db 1 AATGCCTTTGAACCTCCCA 19  
 RESULT 1922  
 ADR78240  
 ID ADR78240 standard; DNA; 19 BP.  
 XX  
 AC ADR78240;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2725.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2725; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL-cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3315 GAAGTCCAAATTCGGATT 3333  
Db 1 GAAGTCCAAATTCGGATT 19

RESULT 1923

ID ADR78269  
ID ADR78269 standard; DNA; 19 BP.

AC ADR78269;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2754.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0494597P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.  
(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2754; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 394 GCTTCATCCTCGAAGACCAG 412  
Db 1 GCTTCATCCTCGAAGACCAG 19

RESULT 1924

ADR78274

ID ADR78274 standard; DNA; 19 BP.

AC ADR78274;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2759.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2759; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 492 TTTGCTGCAGCCATGTCCA 510  
 Db 1 TTTGCTGCAGCCATGTCCA 19  
 RESULT 1925  
 ADR78277  
 ID ADR78277 standard; DNA; 19 BP.  
 XX  
 AC ADR78277;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2762.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2762; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC introducing (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 696 TTTACCGTCAACGACGAGGA 714

Db 1 TTTACCGTCAACGACGAGGA 19

RESULT 1926  
 ADR78285

ID ADR78285 standard; DNA; 19 BP.

AC ADR78285;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2770.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2770; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1298 CTCCTCTCATCTCTCCAG 1316

Db 1 CTCCTCTCATCTCTCCAG 19

RESULT 1927

ADR78300

ID ADR78300 standard; DNA; 19 BP.

AC ADR78300;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2785.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 15-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2785; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2069 ACTTGACCAGCCTCAGCC 2087  
 |||||  
 Db 1 ACTTGACCAGCCTCAGCC 19  
 RESULT 1928  
 ADR78306  
 ID ADR78306 standard; DNA; 19 BP.  
 XX  
 AC ADR78306;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2791.  
 XX  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2791; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2256 TTTTCCCGACAGTGTC A 2274  
 Db 1 TTTTCCCGACAGTGTC A 19  
 RESULT 1929  
 ADR78312  
 ID ADR78312 standard; DNA; 19 BP.  
 XX  
 AC ADR78312;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2797.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; neurotropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX DR WPI, 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2797; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2420 TTTGAATCCAAAGAGTC 2438  
 Db 1 TTTGAATCCAAAGAGTC 19  
 RESULT 1930  
 ADR78321  
 ID ADR78321 standard; DNA; 19 BP.  
 XX  
 AC ADR78321;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2806.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; neurotropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2806; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2994 CTCATTGAGACAGGCAGT 3012  
 |||||

Db 1 CTCATTGAGACAGGCAGT 19  
 RESULT 1931  
 ADR78471  
 ID ADR78471 standard; DNA; 19 BP.  
 XX ADR78471;  
 AC ADR78471;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 2956.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2806; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2994 CTCATTGAGACAGGCAGT 3012  
 |||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1105 TGAAGACTCTCCAGGAAGT 1123  
 Db 1 TGAAGACTCTCCAGGAAGT 19

RESULT 1932

ADR78483

ID ADR78483 standard; DNA; 19 BP.

AC ADR78483;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2968.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454285P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-MAR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 09-MAY-2003; 2003US-0465802P.

PR 08-AUG-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0493986P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WO2004080406-A2.

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WPI; 2004-677362/56.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 2968; 378pp; English.

The invention describes a RNA interference (RNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4422 GATTCGAATATCAAAATTC A 4440

Db 1 GATTCGAATATCAAAATTC A 19

RESULT 1933

ADR78498

ID ADR78498 standard; DNA; 19 BP.

AC ADR78498;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2983.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; RNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.





CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 368 TGAGCTGGAGGTTCCTCCAG 386  
 DB 1 TGAGCTGGAGGTTCCTCCAG 19  
 RESULT 1935  
 ADR78584  
 ID ADR78584 standard; DNA; 19 BP.  
 XX  
 AC ADR78584;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3069.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0485655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

PS Example 5; SEQ ID NO 3069; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 4 A; 8 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2062 TTCCATCACTTGACCCAGC 2080

DB 1 TTCCATCACTTGACCCAGC 19

RESULT 1936

ADR78612

ID ADR78612 standard; DNA; 19 BP.

XX

AC ADR78612;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3097.

XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

PN

XX 23-SEP-2004.

PD

XX 08-MAR-2004; 2004WO-US007070.

PF

XX

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3097; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2645 CACTGGAGCTGGATTACAG 2663  
 Db 1 CACTGGAGCTGGATTACAG 19  
 |||||  
 RESULT 1937  
 ADR78625  
 ID ADR78625 standard; DNA; 19 BP.  
 XX  
 AC ADR78625;

XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3110.  
 XX  
 DE  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3110; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2645 CACTGGAGCTGGATTACAG 2663  
 Db 1 CACTGGAGCTGGATTACAG 19  
 |||||  
 RESULT 1937  
 ADR78625  
 ID ADR78625 standard; DNA; 19 BP.  
 XX  
 AC ADR78625;

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 2 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2882 AGCTGGGAAGCTCAAGTTT 2900  
 |||||  
 Db 1 AGCTGGGAAGCTCAAGTTT 19

## RESULT 1938

ADNR78638  
 ID ADNR78638 standard; DNA; 19 BP.

AC ADNR78638;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3123.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3123; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3511 GTTTCGAAGCAGGAGCCAG 3529  
 |||||

Db 1 GTTTCGAAGCAGGAGCCAG 19

## RESULT 1939

ADNR78641

ID ADNR78641 standard; DNA; 19 BP.

AC ADNR78641;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3126.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3126; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3564 CTGCTTCTCCAAATGCACT 3592
XX Db 1 CTGCTTCTCCAAATGCACT 19
XX
XX RESULT 1940
XX ADR78669
XX ID ADR78669 standard; DNA; 19 BP.
XX
XX AC ADR78669;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3154.

```

```

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3154; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3564 CTGCTTCTCCAAATGCACT 3592
XX Db 1 CTGCTTCTCCAAATGCACT 19
XX
XX RESULT 1940
XX ADR78669
XX ID ADR78669 standard; DNA; 19 BP.
XX
XX AC ADR78669;
XX
XX XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3154.

```

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0;

QY 4151 CATTCCCAAGTGTATCAA 4169

Db 1 CATTCCCAAGTGTATCAA 19

RESULT 1941

ADR78893

ID ADR78893 standard; DNA; 19 BP.

XX AC ADR78893;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3378.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 09-MAY-2003; 2003US-0469612P.

XX PR 08-AUG-2003; 2003US-0493986P.

XX PR 11-AUG-2003; 2003US-0494597P.

XX PR 26-SEP-2003; 2003US-0506341P.

XX PR 09-OCT-2003; 2003US-0510246P.

XX PR 10-OCT-2003; 2003US-0510318P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 3378; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

Matches 19; Conservative 0;

QY 2580 AGGAAGGCTCAAGAATG 2598

Db 1 AGGAAGGCTCAAGAATG 19

RESULT 1942

ADR78930

ID ADR78930 standard; DNA; 19 BP.

XX AC ADR78930;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3415.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX PD 23-SEP-2004.

XX PF 08-MAR-2004; 2004WO-US007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

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PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3415; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 343 GTGCCACCAAGGATCAACTG 361
Db 1 GTGCCACCAAGGATCAACTG 19
RESULT 1943
ADR78934
ID ADR78934 standard; DNA; 19 BP.
XX
XX ADR78934;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3419.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;

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KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465655P.
XX 09-MAY-2003; 2003US-046802P.
XX 08-AUG-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3419; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

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Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 393 AGCTTCATCTGGAAGACCA 411
    |||||
DB 1 AGCTTCATCTGGAAGACCA 19

RESULT 1944
ADR78967
ID ADR78967 standard; DNA; 19 BP.
AC ADR78967;
XX
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3452.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apOB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3452; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apOB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apOB-100 levels or glucose-6-phosphatase levels. (MI)
is useful for reducing apOB-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apOB-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
hypercholesterolaemia, coronary artery disease (CAD), coronary heart
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApOB) antisense oligonucleotide that
can be used to control ApOB gene expression.
XX
SQ Sequence 19 BP; 6 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 712 GGAAGGGCAATGTGGCAAC 730
    |||||
DB 1 GGAAGGGCAATGTGGCAAC 19

RESULT 1945
ADR79024
ID ADR79024 standard; DNA; 19 BP.
XX
XX ADR79024;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3509.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apOB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3452; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apOB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);

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PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3509; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1747 ACCAGGAGGTTCTTCTTCA 1765  
 Db 1 ACCAGGAGGTTCTTCTTCA 19  
 RESULT 1946  
 ADR79056  
 ID ADR79056 standard; DNA; 19 BP.  
 XX  
 AC ADR79056;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3541.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; as.  
 XX Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3541; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 1 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



Qy 2203 TCGAAGGAAAAGGCTTTGA 2221  
 Db 1 TCGAAGGAAAAGGCTTTGA 19

RESULT 1947  
 ADR79061  
 ID ADR79061 standard; DNA; 19 BP.  
 XX  
 AC ADR79061;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3546.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0491986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3546; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2230 TCGAAGCTCTTTTGGGAA 2248  
 Db 1 TCGAAGCTCTTTTGGGAA 19

RESULT 1948

ADR79064

ID ADR79064 standard; DNA; 19 BP.

XX ADR79064;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3549.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465802P.

PR 08-MAY-2003; 2003US-0469612P.

PR 11-AUG-2003; 2003US-0491986P.

PR 26-SEP-2003; 2003US-0494597P.

PR 09-OCT-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0518453P.

XX

[illegible]

RESULT 1950  
 ADR79139  
 ID ADR79139 standard; DNA; 19 BP.  
 XX  
 AC ADR79139;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3624.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0519453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3624; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 3514 TGCAGCAGAGCCAGAG 3532  
 Db 1 TGCAGCAGAGCCAGAG 19  
 RESULT 1951  
 ADR79144  
 ID ADR79144 standard; DNA; 19 BP.  
 XX  
 AC ADR79144;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3629.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0519453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3624; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or

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DR WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 3629; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3577 TGGACTCATCTGCTACAGC 3595
Db 1 TGGACTCATCTGCTACAGC 19
RESULT 1952
AD79162
AC AD79162 standard; DNA; 19 BP.
XX AC AD79162;
XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3647.
DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.
XX W02004080406-A2.
XX 23-SEP-2004.
PD

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XX PF 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
PA Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 3647; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX Sequence 19 BP; 6 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4008 TTGAAATTCAGATTCCTT 4026
Db 1 TTGAAATTCAGATTCCTT 19
RESULT 1953
AD79590

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ID ADR79590 standard; DNA; 19 BP.  
AC ADR79590;  
XX  
XX  
DT 16-DEC-2004 (first entry)  
XX  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4082.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0462894P.  
PR 25-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 08-MAY-2003; 2003US-0469612P.  
PR 11-AUG-2003; 2003US-0493986P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX  
DR WPI; 2004-677362/66.  
XX  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4082; 379pp; English.  
XX  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modifications in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instructions for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
XX  
XX  
SQ Sequence 19 BP; 4 A; 8 C; 1 G; 6 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2060 TCTTCCATCATCTTGACCCA 2078  
Db 1 TCTTCCATCATCTTGACCCA 19  
  
RESULT 1954  
ADR79602  
ID ADR79602 standard; DNA; 19 BP.  
XX  
XX  
AC ADR79602;  
XX  
XX  
DT 16-DEC-2004 (first entry)  
XX  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4096.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0462894P.  
PR 25-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 08-MAY-2003; 2003US-0469612P.  
PR 11-AUG-2003; 2003US-0493986P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX  
DR WPI; 2004-677362/66.  
XX  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense

```

PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 4096; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2544 CTGCAGGGGATCCCCCAGA 2562
DB 1 CTGCAGGGGATCCCCCAGA 19
RESULT 1955
ADR79635
ID ADR79635 standard; DNA; 19 BP.
XX
AC ADR79635;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4129.
XX
XX antilipemic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
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XX 07-MAR-2003; 2003US-0452682P.
XX

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4129; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4894 TGACCTTCTCTAAGCAAAA 4912
DB 1 TGACCTTCTCTAAGCAAAA 19
RESULT 1956
ADR79723
ID ADR79723 standard; DNA; 19 BP.
XX
XX ADR79723;
AC
XX

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CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3401 ACTCACCTGGACATTCAG 3419

Db 1 ACTCACCTGGACATTCAG 19  
 |||||

RESULT 1958

ID ADR79841 standard; DNA; 19 BP.

XX ADR79841;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4335.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4335; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2237 TCTTTTGGGAGCAGGA 2255

Db 1 TCTTTTGGGAGCAGGA 19  
 |||||

RESULT 1959

ADR79859

ID ADR79859 standard; DNA; 19 BP.

XX ADR79859;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4355.



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 4355; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3823 TTGCAATGAGCTCATGGCT 3841

Db 1 TTGCAATGAGCTCATGGCT 19

RESULT 1960

ADR80207

ID ADR80207 standard; DNA; 19 BP.

XX AC ADR80207;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4704.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4704; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation targets a human gene sequence. Also described

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nucleic acid sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance,

XX dyslipidemia, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I); involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3045 CTGAATTACTGCACCTCAG 3063  
|||||  
DB 1 CTGAATTACTGCACCTCAG 19

RESULT 1961  
ADR80389  
ID ADR80389 standard; DNA; 19 BP.  
XX  
AC ADR80389;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4886.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; IRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
PI WPI; 2004-677362/66.  
XX  
DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 4886; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4549 AAAAGAAACAGCATTTGTT 4567  
|||||  
DB 1 AAAAGAAACAGCATTTGTT 19

RESULT 1962  
ADR80452  
ID ADR80452 standard; DNA; 19 BP.  
XX  
AC ADR80452;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4949.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; IRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW

coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4949; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100 levels or glucose-6-phosphatase  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4100 GTCTGTGGATTCATCTG 4118  
 |||||  
 DB 1 GTCTGTGGATTCATCTG 19  
 RESULT 1963  
 ADR75572  
 ID ADR75572 standard; DNA; 19 BP.  
 XX  
 XX ADR75572;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 57.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Buncrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 57; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100 levels or glucose-6-phosphatase  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2902 TCATTCTTCCCCCAAGAG 2920  
 |||||  
 Db 1 TCATTCTTCCCCCAAGAG 19

RESULT 1964  
 ADR75650  
 ID ADR75650 standard; DNA; 19 BP.  
 AC ADR75650;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 135.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 135; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 392 CAGCTTCATCTCTGAGACC 410  
 |||||  
 Db 1 CAGCTTCATCTCTGAGACC 19

RESULT 1965  
 ADR75655  
 ID ADR75655 standard; DNA; 19 BP.  
 AC ADR75655;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 140.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 140; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 483 TCTGAGGAGTTTGTCTGCAG 501  
 Db |||||  
 1 TCTGAGGAGTTTGTCTGCAG 19  
 RESULT 1966  
 ADR75692  
 ID ADR75692 standard; DNA; 19 BP.  
 XX AC ADR75692;  
 DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 177.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 177; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 0 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2373 GATATGTAATGGAATAA 2391  
 Db 1 GATATGTAATGGAATAA 19  
 RESULT 1967  
 AD75731  
 ID AD75731 standard; DNA; 19 BP.  
 XX  
 AC AD75731;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 216.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 216; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 2 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4570 TCAAAGAGTCAAGATTGA 4588  
 Db 1 TCAAAGAGTCAAGATTGA 19  
 RESULT 1968  
 AD75734  
 ID AD75734 standard; DNA; 19 BP.  
 XX  
 AC AD75734;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 219.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX



CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 0 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 27 GTCCCTTCTCGGTTGCTG 45  
 DB 1 GTCCCTTCTCGGTTGCTG 19  
 |||||

RESULT 1970  
 ADR75855  
 ID ADR75855 standard; DNA; 19 BP.  
 XX  
 AC ADR75855;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 340.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 14-APR-2003; 2003US-0455050P.  
 XX  
 XX 17-APR-2003; 2003US-0462894P.  
 XX  
 XX 25-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 08-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX DR

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 340; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1221 TCTCTTCTGCCACAGCTGA 1239  
 DB 1 TCTCTTCTGCCACAGCTGA 19  
 |||||

RESULT 1971  
 ADR75858  
 ID ADR75858 standard; DNA; 19 BP.  
 XX  
 AC ADR75858;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 343.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX  
 XX 14-APR-2003; 2003US-0455050P.  
 XX  
 XX 17-APR-2003; 2003US-0462894P.  
 XX  
 XX 25-APR-2003; 2003US-0463772P.  
 XX  
 XX 25-APR-2003; 2003US-0465665P.  
 XX  
 XX 25-APR-2003; 2003US-0465802P.  
 XX  
 XX 08-MAY-2003; 2003US-0469612P.  
 XX  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX PA Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX DR



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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 343; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1959 CTGAAAGGTTAGTGAAG 1977
XX |||||
XX Db 1 CTGAAAGGTTAGTGAAG 19
XX
XX RESULT 1972
XX ADR75882
XX ID ADR75882 standard; DNA; 19 BP.

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XX AC ADR75882;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 367.
XX
XX KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX XX 23-SEP-2004.
XX
XX XX 08-MAR-2004; 2004WO-US007070.
XX
XX PF 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0493986P.
XX PR 08-AUG-2003; 2003US-0494597P.
XX PR 11-AUG-2003; 2003US-0506341P.
XX PR 26-SEP-2003; 2003US-0510246P.
XX PR 09-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 367; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1959 CTGAAAGGTTAGTGAAG 1977
XX |||||
XX Db 1 CTGAAAGGTTAGTGAAG 19
XX
XX RESULT 1972
XX ADR75882
XX ID ADR75882 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 91 CAGGCCGAGCCGAGC 109  
 |||||  
 Db 1 CAGGCCGAGCCGAGC 19

RESULT 1973  
 ADR75895  
 ID ADR75895 standard; DNA; 19 BP.  
 AC ADR75895;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 380.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465865P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 380; 378pp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 593 CATCAAGAGGGGCATCATT 611  
 |||||  
 Db 1 CATCAAGAGGGGCATCATT 19

RESULT 1974  
 ADR75898  
 ID ADR75898 standard; DNA; 19 BP.  
 AC ADR75898;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 383.  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0452682P.
PR 17-APR-2003; 2003US-0462894P.
PR 25-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 383; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e-02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 648 AAGCAAGTGTGTTCTCGG 666
XX |||||
XX Db 1 AAGCAAGTGTGTTCTCGG 19
XX
XX RESULT 1975
XX AD75922
XX ID AD75922 standard; DNA; 19 BP.
XX AC AD75922;
XX XX
XX DT 16-DEC-2004 (first entry)

```

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XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 407.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PP 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0469612P.
XX PR 09-MAY-2003; 2003US-0493986P.
XX PR 08-AUG-2003; 2003US-0494597P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PA Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 407; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instructions for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 11 A; 4 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1120 AACTGAAAAAATAACCAT 1138  
 |||||  
 Db 1 AACTGAAAAAATAACCAT 19

RESULT 1976  
 ADR75925  
 ID ADR75925 standard; DNA; 19 BP.  
 XX  
 AC ADR75925;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 410.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 PI  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 410; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1142 TGAGCAAAATATCCAGAGA 1160  
 |||||  
 Db 1 TGAGCAAAATATCCAGAGA 19

RESULT 1977  
 ADR75927  
 ID ADR75927 standard; DNA; 19 BP.  
 XX  
 AC ADR75927;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 412.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 412; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1184 TACTGAGCTGAGAGGCTC 1202  
 Db 1 TACTGAGCTGAGAGGCTC 19  
 RESULT 1978  
 AD75936  
 ID AD75936 standard; DNA; 19 BP.  
 XX  
 AC AD75936;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 421.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytotstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454655P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 421; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

```

XX Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1359 GTCACCTACTCTGTTGCC 1377
DB 1 GTCACCTACTCTGTTGCC 19

RESULT 1979
AD75960
ID ADR75960 standard; DNA; 19 BP.
XX
AC ADR75960;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 445.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469812P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 445; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described

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are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1949 TATCCAGATCTGAAAAAG 1967  
DB 1 TATCCAGATCTGAAAAAG 19

RESULT 1980  
AD75977  
ID ADR75977 standard; DNA; 19 BP.  
XX  
AC ADR75977;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 462.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 14-APR-2003; 2003US-0455050P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469812P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 445; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 462; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2267 CAGTGTCAACAAAGCTTTG 2285
Db 1 CAGTGTCAACAAAGCTTTG 19

RESULT 1981
ID ADR75989 standard; DNA; 19 BP.
XX
XX ADR75989;
XX
XX 16-DEC-2004 (first entry)
DT
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 474.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;

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KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
PI WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 474; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;

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Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2619 TTCATGAGAAATGCTTTG 2637  
|||||

Db 1 TTCATGAGAAATGCTTTG 19

RESULT 1982  
ADR76053  
ID ADR76053 standard; DNA; 19 BP.

XX AC ADR76053;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 538.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 14-APR-2003; 2003US-0455050P.  
XX PR 17-APR-2003; 2003US-0462894P.  
XX PR 25-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.  
XX PI Manoharan M, Bumcrot D;  
XX DR WPI; 2004-677362/66.  
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX PT disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 538; 378pp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX CC sense sequence and an antisense sequence, where the sense sequences have  
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX CC sequences have one or more asymmetrical phosphorothioate modifications  
XX CC and the antisense sequence targets a human gene sequence. Also described  
XX CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX CC stabilising (I), involves selecting a sequence with activity and  
XX CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4327 TTCTTACAAATGTGCAAGG 4345  
|||||

Db 1 TTCTTACAAATGTGCAAGG 19

RESULT 1983  
ADR76061  
ID ADR76061 standard; DNA; 19 BP.

XX AC ADR76061;  
XX DT 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 546.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX OS Homo sapiens.  
XX PN WO2004080406-A2.  
XX PD 23-SEP-2004.  
XX PF 08-MAR-2004; 2004WO-US007070.  
XX PR 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 14-APR-2003; 2003US-0455050P.  
XX PR 17-APR-2003; 2003US-0462894P.  
XX PR 25-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 25-APR-2003; 2003US-0465802P.  
XX PR 09-MAY-2003; 2003US-0469612P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494597P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 546; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4656 AACACTGGCGGCTCAATG 4674
Db 1 AACACTGGCGGCTCAATG 19

RESULT 1984
ADR76066
ID ADR76066 standard; DNA; 19 BP.
XX
XX ADR76066;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 551.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticoagulant; nootropic; musculla; anti-HIV;
XX RNA interference; iRNA, antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 551; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4830 CTGACTTTAAATCTGACA 4848

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 733; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 1 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4561 ATTCTTTTGTCAAGAGT 4579
DB |||||
1 ATTCTTTTGTCAAGAGT 19
XX
RESULT 1987
AD76260
ID AD76260 standard; DNA; 19 BP.
XX
AC AD76260;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 745.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX

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XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0469612P.
XX 11-AUG-2003; 2003US-0493986P.
XX 26-SEP-2003; 2003US-0494597P.
XX 09-OCT-2003; 2003US-0506341P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 745; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1186 CTGAGCTGAGAGGCTCTCAG 1204
DB |||||
1 CTGAGCTGAGAGGCTCTCAG 19
XX

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RESULT 1988  
 ADR76263  
 ID ADR76263 standard; DNA; 19 BP.  
 AC ADR76263;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 748.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 748; 378pp; English.  
 XX  
 SS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1510 AGGAGCTGCTGGACATTGC 1528  
 DB 1 AGGAGCTGCTGGACATTGC 19

RESULT 1989  
 ADR76266  
 ID ADR76266 standard; DNA; 19 BP.  
 XX  
 AC ADR76266;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 751.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 748; 378pp; English.  
 XX  
 SS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 751; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1754 GGTCTCTTCTCAGACTTTC 1772

Db 1 GGTCTCTTCTCAGACTTTC 19

RESULT 1990

ADR76308

ID ADR76308 standard; DNA; 19 BP.

AC ADR76308;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 793.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 793; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 247 CAAAAGATGCGACCCGATT 265  
 Db 1 CAAAAGATGCGACCCGATT 19  
 RESULT 1991  
 ADR76314  
 ID ADR76314 standard; DNA; 19 BP.

XX Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 247 CAAAAGATGCGACCCGATT 265

Db 1 CAAAAGATGCGACCCGATT 19

RESULT 1991

ADR76314

XX ID ADR76314 standard; DNA; 19 BP.

AC ADR76314;  
XX  
DT 16-DEC-2004 (first entry)  
DE  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 799.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 799; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 358 ACTGCAAGCTTGAGCTGGA 376  
|||||  
DB 1 ACTGCAAGCTTGAGCTGGA 19  
  
RESULT 1992  
ADR76329  
ID ADR76329 standard; DNA; 19 BP.  
XX  
AC ADR76329;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 814.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 799; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

Example 5; SEQ ID NO 814; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 536 AGAAGGGAGCAGGTTTTC 554

Db 1 AGAAGGGAGCAGGTTTTC 19

RESULT 1993

ADR76342

ID ADR76342 standard; DNA; 19 BP.

AC ADR76342;

XX ADR76342;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 827.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticoagulant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS

XX WO2004080406-A2.

PN 23-SEP-2004.

PD

XX 08-MAR-2004; 2004WO-US007070.

PF

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 827; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 680 AAACGTGCTCCACTGACTTT 698

Db 1 AAACGTGCTCCACTGACTTT 19

RESULT 1994

ADR76367

ID ADR76367 standard; DNA; 19 BP.

XX ADR76367;

AC ADR76367;

XX 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 852.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US0007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 852; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

XX

QQ Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

XX

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0;

QY 1022 CTTTGGTGAAGGTACTAAG 1040

Db 1 CTTTGGTGAAGGTACTAAG 19

RESULT 1995

ADR76400

ID ADR76400 standard; DNA; 19 BP.

XX

AC ADR76400;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 885.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US0007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 885; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or



CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1682 GCCATCACTGATGATCCAG 1700  
 DB 1 GCCATCACTGATGATCCAG 19

RESULT 1996  
 ADR76413  
 ID ADR76413 standard; DNA; 19 BP.  
 AC ADR76413;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 898.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 898; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 3 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1846 ATATTACAAATTTGTCCA 1864  
 DB 1 ATATTACAAATTTGTCCA 19

RESULT 1997  
 ADR76448  
 ID ADR76448 standard; DNA; 19 BP.  
 AC ADR76448;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 933.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US0007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sense and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 933; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX

SQ Sequence 19 BP; 11 A; 3 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2347 ATACCAAGATGATTAACA 2365  
Db 1 ATACCAAGATGATTAACA 19  
RESULT 1998  
ADR76469  
ID ADR76469 standard; DNA; 19 BP.  
XX  
AC ADR76469;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 954.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US0007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sense and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 954; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2511 CTGGGAAGCTGCTTCTGA 2529

DB 1 CTGGGAAGCTGCTTCTGA 19

RESULT 1999

ADR76473

ID ADR76473 standard; DNA; 19 BP.

AC ADR76473;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 958.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 958; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2615 CATCTTCATGGAGAAATGCC 2633

DB 1 CATCTTCATGGAGAAATGCC 19

RESULT 2000

ADR76480

ID ADR76480 standard; DNA; 19 BP.

AC ADR76480;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 965.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 965; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2775 TTTGTGACAAATATGGCA 2793  
 |||||  
 Db 1 TTTGTGACAAATATGGCA 19  
 RESULT 2001  
 ADR76497  
 ID ADR76497 standard; DNA; 19 BP.  
 XX  
 AC ADR76497;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 982.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 982; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3084 TCACAGACTCGCTCTCT 3102  
 Db 1 TCACAGACTCGCTCTCT 19  
 RESULT 2002  
 ADR76505  
 ID ADR76505 standard; DNA; 19 BP.  
 XX ADR76505;  
 AC ADR76505;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 990.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 990; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3244 CAGAAGGTGCGAAGCAGAC 3262  
 Db 1 CAGAAGGTGCGAAGCAGAC 19  
 RESULT 2003  
 ADR76549  
 ID ADR76549 standard; DNA; 19 BP.  
 XX ADR76549;  
 AC ADR76549;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1034.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1034; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 2477 GCTTGGTTTGGCAGTCTC 2495  
 ||||||||||||||||

Db 1 GCTTGGTTTGGCAGTCTC 19  
 RESULT 2004  
 ADR76897  
 ID ADR76897 standard; DNA; 19 BP.  
 XX ADR76897;  
 AC ADR76897;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 1382.  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1382; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 XX Sequence 19 BP; 1 A; 5 C; 5 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 2477 GCTTGGTTTGGCAGTCTC 2495  
 ||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2237 TCTTTTGGGAGCAGGA 2255

Db 1 TCTTTTGGGAGCAGGA 19

RESULT 2005

ADR76927

ID ADR76927 standard; DNA; 19 BP.

XX

AC ADR76927;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1412.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452692P.

XX

PR 12-MAR-2003; 2003US-0454265P.

XX

PR 13-MAR-2003; 2003US-0454962P.

XX

PR 13-MAR-2003; 2003US-0455050P.

XX

PR 14-APR-2003; 2003US-0452894P.

XX

PR 17-APR-2003; 2003US-0453772P.

XX

PR 25-APR-2003; 2003US-0456655P.

XX

PR 25-APR-2003; 2003US-0456802P.

XX

PR 09-MAY-2003; 2003US-0459612P.

XX

PR 08-AUG-2003; 2003US-0493986P.

XX

PR 11-AUG-2003; 2003US-0494597P.

XX

PR 26-SEP-2003; 2003US-0506341P.

CC

DR

XX

XX

PT

PT

PT

XX

XX

PS

XX

CC

CC

CC

CC

CC

CC

CC

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PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1849; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1256 CATCACTTTACAGCCTTG 1274  
 |||||  
 Db 1 CATCACTTTACAGCCTTG 19  
 RESULT 2007

ADR77441  
 ID ADR77441 standard; DNA; 19 BP.  
 XX  
 AC ADR77441;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1926.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1849; 378pp; English.  
 XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4096 TCAAGTCTGGGATTCCA 4114  
 Db 1 TCAAGTCTGGGATTCCA 19  
 RESULT 2008  
 ADR77500  
 ID ADR77500 standard; DNA; 19 BP.  
 XX  
 AC ADR77500;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1985.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0489612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1985; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3202 AGGACAGAGCCTTGTTGGA 3220  
 Db 1 AGGACAGAGCCTTGTTGGA 19  
 RESULT 2009  
 ADR77537  
 ID ADR77537 standard; DNA; 19 BP.  
 XX  
 AC ADR77537;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2022.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2022; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4205 CACGAATGCTACAGCAAC 4223
Db 1 CACGAATGCTACAGCAAC 19
|||||
RESULT 2010
ADR77552
ID ADR77552 standard; DNA; 19 BP.
XX
AC ADR77552;

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XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2037.
XX DE
XX KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2037; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4205 CACGAATGCTACAGCAAC 4223
Db 1 CACGAATGCTACAGCAAC 19
|||||
RESULT 2010
ADR77552
ID ADR77552 standard; DNA; 19 BP.
XX
AC ADR77552;

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4466 CCCAGTCTCAAAAGGTTTA 4484  
 Db 1 CCCAGTCTCAAAAGGTTTA 19

## RESULT 2011

ADRW7569  
 ID ADRW7569 standard; DNA; 19 BP.

XX AC ADRW7569;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2054.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0485665P.

XX 09-MAY-2003; 2003US-0485802P.

XX 08-AUG-2003; 2003US-0496962P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 2054; 378pp; English.

XX

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4803 GCTTCCTCTAAAGTATGAGA 4821

Db 1 GCTTCCTCTAAAGTATGAGA 19

## RESULT 2012

ADRW78155

ID ADRW78155 standard; DNA; 19 BP.

XX AC ADRW78155;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2640.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2640; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 3588 GCTACAGCTTATGGCTCCA 3606  
 DB 1 GCTACAGCTTATGGCTCCA 19  
 |||||  
 RESULT 2013  
 ID AD78182  
 XX AD78182 standard; DNA; 19 BP.  
 AC AD78182;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2667.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 2667; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 3 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2340 TTGGCTATACCAAGATG 2358  
 |||||  
 Db 1 TTGGCTATACCAAGATG 19

## RESULT 2014

ID ADR78231  
 AD R78231 standard; DNA; 19 BP.

XX AC ADR78231;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2716.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 10-OCT-2003; 2003US-0510246P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2716; 378pp; English.

XX The invention describes a RNA interference (IRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2419 ATTTGAATCCAAAGAAGT 2437  
 |||||  
 Db 1 ATTTGAATCCAAAGAAGT 19

## RESULT 2015

AD R78242

ID ADR78242 standard; DNA; 19 BP.

XX AC ADR78242;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2727.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; IRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

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PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2727; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 0 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3639 GAAGAGAAGATTCGAATTG 3657
XX |||||
XX Db 1 GAAGAGAAGATTCGAATTG 19
XX
XX RESULT 2016
XX ADR78258
XX ID ADR78258 standard; DNA; 19 BP.
XX
XX AC ADR78258;
XX
XX XX 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2743.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;

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KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2743; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
XX

```

```

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 222 CTGGAAAATGTCAGCCTGG 240
Db 1 CTGGAAAATGTCAGCCTGG 19

RESULT 2017
ADR78305
ID ADR78305 standard; DNA; 19 BP.
XX
AC ADR78305;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2790.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2790; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);

```

```

CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 4 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2231 GGAAGCTCTTTTGGGAAG 2249
Db 1 GGAAGCTCTTTTGGGAAG 19

RESULT 2018
ADR78307
ID ADR78307 standard; DNA; 19 BP.
XX
AC ADR78307;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2792.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2792; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 66+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2264 AGACAGTGTCAACAAGCT 2282
Db 1 AGACAGTGTCAACAAGCT 19
XX
RESULT 2019
ADNR78308
ID ADNR78308 standard; DNA; 19 BP.
XX
AC ADNR78308;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2793.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX Homo sapiens.
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2793; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 66+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 2339 CTTTGGCTATACCAAGAT 2357  
 Db 1 CTTTGGCTATACCAAGAT 19

RESULT 2020  
 ADR78318  
 ID ADR78318 standard; DNA; 19 BP.  
 XX  
 AC ADR78318;  
 XX  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2803.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 FN  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2803; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence has  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2685 GTCAATTGCTCCCGAGCCA 2703

Db 1 GTCAATTGCTCCCGAGCCA 19

RESULT 2021

ADR78477

ID ADR78477 standard; DNA; 19 BP.

XX ADR78477;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2962.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

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PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2962; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2256 TTTTCCACACAGTGTC A 2274
Db 1 TTTTCCACACAGTGTC A 19
RESULT 2022
AD78504
ID AD78504 standard; DNA; 19 BP.
XX
XX AD78504;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2989.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX Homo sapiens.

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XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-045050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2989; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 301 CTCAGAGTTCACGTGCAGT 319
Db 1 CTCAGAGTTCACGTGCAGT 19

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RESULT 2023  
 ADR78505  
 ID ADR78505 standard; DNA; 19 BP.  
 XX AC ADR78505;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2990.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX XX WO2004080406-A2.  
 XX XX 23-SEP-2004.  
 XX XX 08-MAR-2004; 2004WO-US0007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX XX Manoharan M, Bumcrot D;  
 XX XX WPI; 2004-677362/66.  
 XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 2990; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Caps 0;

QY 309 TCCAGTGGAGTCCCTGGGA 327  
 Db 1 TCCAGTGGAGTCCCTGGGA 19

RESULT 2024

ADR78550

ID ADR78550 standard; DNA; 19 BP.

XX AC ADR78550;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3035.

XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX OS Homo sapiens.

XX XX WO2004080406-A2.

XX XX 23-SEP-2004.

XX XX 08-MAR-2004; 2004WO-US0007070.

XX PR 07-MAR-2003; 2003US-0452682P.

XX PR 12-MAR-2003; 2003US-0454265P.

XX PR 13-MAR-2003; 2003US-0454962P.

XX PR 13-MAR-2003; 2003US-0455050P.

XX PR 14-APR-2003; 2003US-0462894P.

XX PR 17-APR-2003; 2003US-0463772P.

XX PR 25-APR-2003; 2003US-0465665P.

XX PR 25-APR-2003; 2003US-0465802P.

XX PR 09-MAY-2003; 2003US-0493986P.

XX PR 08-AUG-2003; 2003US-0494597P.

XX PR 11-AUG-2003; 2003US-0506341P.

XX PR 26-SEP-2003; 2003US-0510246P.

XX PR 09-OCT-2003; 2003US-0510318P.

XX PR 10-OCT-2003; 2003US-0518453P.

XX PR 07-NOV-2003; 2003US-0518453P.

XX PA (ALNY-) ALNYLAM PHARM.

XX XX Manoharan M, Bumcrot D;

XX XX WPI; 2004-677362/66.

XX XX DR Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX PS Example 5; SEQ ID NO 2990; 378pp; English.

XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3035; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1228 TGCACAGCTGATTGAGGT 1246  
|||||  
Db 1 TGCACAGCTGATTGAGGT 19

RESULT 2025  
ADR78563  
ID ADR78563 standard; DNA; 19 BP.

XX  
AC ADR78563;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3048.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
XX  
XX W02004080406-A2.  
XX  
XX 23-SEP-2004.

XX  
PF 08-MAR-2004; 2004WO-US007070.

XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
PA  
XX Manoharan M, Bumcrot D;  
PI  
XX WPI; 2004-677362/66.

XX  
DR  
XX  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 3048; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphate levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX  
SQ Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1639 CAGAACTCAAGTCTTCAAT 1657  
|||||  
Db 1 CAGAACTCAAGTCTTCAAT 19

RESULT 2026  
ADR78591

AD78581 standard; DNA; 19 BP.  
 AD78581;  
 16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3066.  
 antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytosolic; anticonvulsant; nootropic; muscle; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 14-MAR-2003; 2003US-0455050P.  
 17-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 08-AUG-2003; 2003US-0469612P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3066; 379pp; English.  
 The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.  
 SQ Sequence 19 BP; 10 A; 0 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1960 TGAATAAGTTAGTGAAAGA 1978  
 Db 1 TGAATAAGTTAGTGAAAGA 19  
 RESULT 2027  
 AD78590  
 ID ADR78590 standard; DNA; 19 BP.  
 XX  
 AC ADR78590;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3075.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscle; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense



DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3099.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 23-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3099; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

XX can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2662 AGTTGCAAAATATCTTCATC 2680

Db 1 AGTTGCAAAATATCTTCATC 19

RESULT 2030

ADR78619

ID ADR78619 standard; DNA; 19 BP.

XX AC ADR78619;

XX DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3104.

XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

XX KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;

XX KW RNA interference; iRNA; antisense technology; lipid metabolism;

XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX KW coronary artery disease; CAD; coronary heart disease; CHD;

XX KW atherosclerosis; hepatic glucose production;

XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX KW colon cancer; lung cancer; neurological disease; Huntington disease;

XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0489612P.

XX 11-AUG-2003; 2003US-0493986P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3104; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC The invention describes a RNA interference (irRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 2768 TGTGGAGTTTGACAAAT 2786  
 Db 1 TGTGGAGTTTGACAAAT 19  
 RESULT 2031  
 ADNR78633  
 ID ADNR78633 standard; DNA; 19 BP.  
 XX  
 AC ADNR78633;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3118.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; irRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 XX Example 5; SEQ ID NO 3118; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (irRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 3355 TCCTCAGAGTTTAAATGATGA 3373  
 Db 1 TCCTCAGAGTTTAAATGATGA 19  
 RESULT 2032  
 ADNR78653  
 ID ADNR78653 standard; DNA; 19 BP.  
 XX  
 AC ADNR78653;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3138.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; irRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 PN  
 PD 23-SEP-2004.  
 PD  
 PF 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 PA  
 PI Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3138; 378pp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing (I) or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 10 A; 3 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3687 AAAAAATGACTTCCAATT 3705

Db 1 AAAAAATGACTTCCAATT 19

RESULT 2033

ADR78654

ID ADR78654 standard; DNA; 19 BP.

XX ADR78654;

AC 16-DEC-2004 (first entry)

DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3139.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3139; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing (I) or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 9 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3688 AAAAAATGACTTCCAATTT 3706  
 |||||  
 DB 1 AAAAAATGACTTCCAATTT 19

RESULT 2034  
 ADR78657  
 ID ADR78657 standard; DNA; 19 BP.  
 XX  
 AC ADR78657;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3142.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3142; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3909 TTCACCTTCGAGACATGG 3927  
 |||||  
 DB 1 TTCACCTTCGAGACATGG 19

RESULT 2035  
 ADR78682  
 ID ADR78682 standard; DNA; 19 BP.  
 XX  
 AC ADR78682;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3167.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3167; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 2 A; 11 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4755 TCCCTCACCTCCACCTCTG 4773  
 Db 1 TCCCTCACCTCCACCTCTG 19

## RESULT 2036

ADR78894  
 ID ADR78894 standard; DNA; 19 BP.  
 XX AC ADR78894;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3379.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3379; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 5 A; 3 C; 2 G; 9 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2593 AGAATGACTTTTCTTCA 2611  
 |||||  
 DB 1 AGAATGACTTTTCTTCA 19

RESULT 2037  
 ADR78951  
 ID ADR78951 standard; DNA; 19 BP.  
 XX  
 AC ADR78951;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3436.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3436; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 4 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 586 TCCTGAACATCAAGAGGGG 604  
 |||||  
 DB 1 TCCTGAACATCAAGAGGGG 19

RESULT 2038  
 ADR78952  
 ID ADR78952 standard; DNA; 19 BP.  
 XX  
 AC ADR78952;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3437.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3437; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 588 CTGAACATCAAGAGGGGCA 606  
 DB 1 CTGAACATCAAGAGGGGCA 19  
 RESULT 2039  
 ADR78960  
 ID ADR78960 standard; DNA; 19 BP.  
 XX AC ADR78960;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3445.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469812P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3445; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 680 AACTGCTCCTCACTTT 698  
 Db 1 AACTGCTCCTCACTTT 19  
 RESULT 2040  
 ADR78983  
 ID ADR78983 standard; DNA; 19 BP.  
 AC ADR78983;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3468.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3468; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 5 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 988 AACTTGACACACACCAA 1006  
 Db 1 AACTTGACACACACCAA 19  
 RESULT 2041  
 ADR78989  
 ID ADR78989 standard; DNA; 19 BP.  
 XX  
 AC ADR78989;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3474.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3474; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 0.18; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1097 AGCTGTTTGAAGACTCTC 1115  
 Dd 1 AGCTGTTTGAAGACTCTC 19

RESULT 2042  
 ADR79003  
 ID ADR79003 standard; DNA; 19 BP.  
 XX AC ADR79003;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3488.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0469612P.  
 PR 08-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3488; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1395 GCACAGCAGCTGCAGAGA 1413  
 DB 1 GCACAGCAGCTGCAGAGA 19  
 |||||

RESULT 2043  
 ADR79014  
 ID ADR79014 standard; DNA; 19 BP.  
 XX  
 AC ADR79014;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3499.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3499; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1625 GGAGCAGTTAACTCCAGAA 1643  
 DB 1 GGAGCAGTTAACTCCAGAA 19  
 |||||

RESULT 2044  
 ADR79033  
 ID ADR79033 standard; DNA; 19 BP.  
 XX  
 AC ADR79033;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3518.  
 DE  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 08-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3518; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1887 GAGCAAGTGAAGACTTTG 1905
Db 1 GAGCAAGTGAAGACTTTG 19
|||||
RESULT 2045
ADR79047
ID ADR79047 standard; DNA; 19 BP.

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XX AC ADR79047;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3532.
XX
XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 08-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3532; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1887 GAGCAAGTGAAGACTTTG 1905
XX Db 1 GAGCAAGTGAAGACTTTG 19
XX |||||
XX
XX RESULT 2045
XX ADR79047
XX ID ADR79047 standard; DNA; 19 BP.

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2039 TCAACTCTACAAATCTGTT 2057  
 |||||  
 Db 1 TCAACTCTACAAATCTGTT 19

RESULT 2046  
 ADR79048  
 ID ADR79048 standard; DNA; 19 BP.  
 XX  
 AC ADR79048;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3533.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 PS Example 5; SEQ ID NO 3533; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2041 AACCTTACAAATCTGTTTC 2059  
 |||||  
 Db 1 AACCTTACAAATCTGTTTC 19

RESULT 2047  
 ADR79078  
 ID ADR79078 standard; DNA; 19 BP.  
 XX  
 AC ADR79078;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3563.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3563; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2426 ATCCAAAGAGTCCCGAA 2444  
 Db 1 ATCCAAAGAGTCCCGAA 19  
 RESULT 2048  
 AD79090  
 ID AD79090 standard; DNA; 19 BP.  
 XX  
 AC AD79090;  
 XX  
 DT 16-DEC-2004 (first entry)

XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3575.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3575; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

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CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 3 A; 6 C; 0 G; 10 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2600 CTTTTCCTTCTACTATC 2618
Db 1 CTTTTCCTTCTACTATC 19

RESULT 2049
ID ADR79101 standard; DNA; 19 BP.
XX
AC ADR79101;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3586.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3586; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a

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CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2818 GTGGGTCCTCAGATGAACAC 2836
Db 1 GTGGGTCCTCAGATGAACAC 19

RESULT 2050
ID ADR79106 standard; DNA; 19 BP.
XX
AC ADR79106;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3591.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.

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PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 08-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3591; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2889 AAGCTGAAGTTATCATTC 2907  
 DB 1 AAGCTGAAGTTATCATTC 19  
 RESULT 2051  
 ADR79137  
 ID ADR79137 standard; DNA; 19 BP.  
 XX  
 AC ADR79137;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3622.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454365P.  
 PR 13-MAR-2003; 2003US-0454362P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3622; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2889 AAGCTGAAGTTATCATTC 2907  
 DB 1 AAGCTGAAGTTATCATTC 19  
 RESULT 2051  
 ADR79137  
 ID ADR79137 standard; DNA; 19 BP.  
 XX  
 AC ADR79137;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3622.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

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XX Sequence 19 BP; 7 A; 1 C; 4 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3483 AAAATCAAGGCTGTTATTT 3501
DB 1 AAAATCAAGGCTGTTATTT 19

RESULT 2052
AD79155
ID ADR79155 standard; DNA; 19 BP.
AC ADR79155;
XX
XX 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3640.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 13-MAR-2003; 2003US-0455050P.
XX
XX 14-APR-2003; 2003US-0462894P.
XX
XX 17-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3640; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels of glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 9 A; 4 C; 1 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3950 AGAAACCTCTTCTTAAAA 3968
DB 1 AGAAACCTCTTCTTAAAA 19

RESULT 2053
AD79164
ID ADR79164 standard; DNA; 19 BP.
XX
XX ADR79164;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3649.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosolic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
XX 13-MAR-2003; 2003US-0455050P.
XX
XX 14-APR-2003; 2003US-0462894P.
XX
XX 17-APR-2003; 2003US-0463772P.
XX
XX 25-APR-2003; 2003US-0465665P.
XX
XX 25-APR-2003; 2003US-0465802P.
XX
XX 09-MAY-2003; 2003US-0469612P.
XX
XX 08-AUG-2003; 2003US-0493986P.
XX
XX 11-AUG-2003; 2003US-0494597P.
XX
XX 26-SEP-2003; 2003US-0506341P.
XX
XX 09-OCT-2003; 2003US-0510246P.
XX
XX 10-OCT-2003; 2003US-0510318P.
XX
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3640; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 3649; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 6 A; 1 C; 6 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4062 ATGTTAGAGACTGTTAGGA 4080  
 Db 1 ATGTTAGAGACTGTTAGGA 19  
 RESULT 2054  
 ID ADR79197  
 XX ADR79197 standard; DNA; 19 BP.  
 AC ADR79197;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3682.  
 DE  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3682; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;

```
Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4624 GCACATATGCGCTGCTTG 4642
Db 1 GCACATATGCGCTGCTTG 19

RESULT 2055
ADR79496
ID ADR79496 standard; DNA; 19 BP.
XX AC ADR79496;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3988.
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX PA (ALNY-) ALNYLAM PHARM.
XX PI Manoharan M, Bumcrot D;
XX DR WPI; 2004-677362/66.
XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX PS Example 5; SEQ ID NO 3988; 378pp; English.
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
```

```
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2908 CTTCCCAAGAGACGAGT 2926
Db 1 CTTCCCAAGAGACGAGT 19

RESULT 2056
ADR79587
ID ADR79587 standard; DNA; 19 BP.
XX AC ADR79587;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4079.
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX KW RNA interference; iRNA; antisense technology; lipid metabolism;
XX KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KW coronary artery disease; CAD; coronary heart disease; CHD;
XX KW atherosclerosis; hepatic glucose production;
XX KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KW colon cancer; lung cancer; neurological disease; Huntington disease;
XX KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX OS Homo sapiens.
XX PN WO2004080406-A2.
XX PD 23-SEP-2004.
XX PF 08-MAR-2004; 2004WO-US007070.
XX PR 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
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PR 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4079; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3933 CCAGACTTCCACATCCCG 3951
DB 1 CCAGACTTCCACATCCCG 19
XX
RESULT 2057
AD979830
ID ADR79830 standard; DNA; 19 BP.
XX
XX ADR79830;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4324.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX OS Homo sapiens.
XX WO2004080406-A2.
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4324; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4262 CAGCACAGACCATTTTCAGC 4280

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DB 1 CAGCAGACCATTTTCAGC 19  
 RESULT 2058  
 ADR79864  
 ID ADR79864 standard; DNA; 19 BP.  
 XX ADR79864;  
 AC ADR79864;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4360.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0506341P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4360; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 1678 CAAAGCCATCACTGATGAT 1696  
 |||||  
 DB 1 CAAAGCCATCACTGATGAT 19  
 |||||  
 RESULT 2059  
 ADR80193  
 ID ADR80193 standard; DNA; 19 BP.  
 XX ADR80193;  
 AC ADR80193;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4690.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0506341P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4360; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4690; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4240 CCTCTACAGTGGTGGCAA 4258  
 Db 1 CCTCTACAGTGGTGGCAA 19  
 RESULT 2060  
 ID ADR80215  
 AC ADR80215; standard; DNA; 19 BP.  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4712.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticoagulant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.

XX PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PT WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4712; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3562 AACTGCTTCTCCAATGGA 3580  
 Db 1 AACTGCTTCTCCAATGGA 19  
 XX

RESULT 2061  
 ADR80360  
 ID ADR80360 standard; DNA; 19 BP.  
 AC  
 CC ADR80360;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4857.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4857; 378pp; English.  
 PS  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2770 TGGAGTTTGTGCAATAT 2788  
 DB 1 TGGAGTTTGTGCAATAT 19  
 RESULT 2062  
 ADR80379  
 ID ADR80379 standard; DNA; 19 BP.  
 AC  
 CC ADR80379;  
 CC  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4876.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; musclic; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 4857; 378pp; English.  
 PS  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4876; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4910 AAATGCACCTGCTGCTTCT 4928

Db 1 AAATGCACCTGCTGCTTCT 19

RESULT 2063

ADR80428

XX ADR80428 standard; DNA; 19 BP.

XX ADR80428;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4925.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4925; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4395 GATGGGTCTCTACGCCACA 4413

Db 1 GATGGGTCTCTACGCCACA 19

RESULT 2064

ADR75624

XX ADR75624 standard; DNA; 19 BP.

AC ADR75624;  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 109.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
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 XX  
 PS Example 5; SEQ ID NO 109; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
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 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
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 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control apoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 0 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3639 GAAGAGAGATTGAATTG 3657  
 DB 1 GAAGAGAGATTGAATTG 19  
 RESULT 2065  
 ADR75639  
 ID ADR75639 standard; DNA; 19 BP.  
 XX  
 AC ADR75639;  
 XX  
 XX 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 124.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 109; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

```

PS Example 5; SEQ ID NO 124; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instructions for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 10 A; 1 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 211 AAGAGGAATGCTGGAAAA 229
DB 1 AAGAGGAATGCTGGAAAA 19
RESULT 2066
ID ADR75653 standard; DNA; 19 BP.
AC ADR75653;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 138.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosatic; anticoagulant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX
XX 12-MAR-2003; 2003US-0454265P.
XX
XX 13-MAR-2003; 2003US-0454962P.
XX
13-MAR-2003; 2003US-0455050P.
14-APR-2003; 2003US-0462894P.
17-APR-2003; 2003US-0463772P.
25-APR-2003; 2003US-0465665P.
25-APR-2003; 2003US-0465802P.
09-MAY-2003; 2003US-0469612P.
08-AUG-2003; 2003US-0493986P.
11-AUG-2003; 2003US-0494597P.
26-SEP-2003; 2003US-0506341P.
09-OCT-2003; 2003US-0510246P.
10-OCT-2003; 2003US-0510318P.
07-NOV-2003; 2003US-0518453P.
(ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 138; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instructions for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 9 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 470 GAAACCAAGAACTCTGAG 488
DB 1 GAAACCAAGAACTCTGAG 19
RESULT 2067
AD75700
ID ADR75700 standard; DNA; 19 BP.
XX
XX ADR75700;
AC
XX
XX 16-DEC-2004 (first entry)
XX
XX

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DE Human apolipoprotein B (ApoB) oligonucleotide seqid 185.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PP 08-MAR-2004; 2004WO-US007070.  
 XX  
 PP 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 185; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 QY 2685 GTCAATTGCTCCCGAGGCCA 2703  
 |||||  
 Db 1 GTCAATTGCTCCCGAGGCCA 19  
 |||||  
 RESULT 2068  
 ADR75708  
 ID ADR75708 standard; DNA; 19 BP.  
 XX  
 AC ADR75708;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 193.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PP 08-MAR-2004; 2004WO-US007070.  
 XX  
 PP 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 185; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or



one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3481 GAAATCAAGGGTGTAT 3499  
DB 1 GAAATCAAGGGTGTAT 19

## RESULT 2069

ID ADR75709 standard; DNA; 19 BP.

AC ADR75709;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 194.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

PN W02004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 194; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3484 AAATCAAGGGTGTATTC 3502

DB 1 AAATCAAGGGTGTATTC 19

## RESULT 2070

ADR75718

ID ADR75718 standard; DNA; 19 BP.

AC ADR75718;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 203.

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 203; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

SQ Sequence 19 BP; 8 A; 7 C; 1 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3937 ACTTCCACATCCGAGAAA 3955  
 Db 1 ACTTCCACATCCGAGAAA 19  
 RESULT 2071  
 ADR75723  
 ID ADR75723 standard; DNA; 19 BP.  
 XX AC  
 XX ADR75723;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 208.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 208; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4135 AAGTCCCTACTTTTACCAT 4153  
 Db 1 AAGTCCCTACTTTTACCAT 19  
 RESULT 2072  
 ADR75730  
 ID ADR75730 standard; DNA; 19 BP.  
 AC ADR75730;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 215.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyrostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454982P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 215; 378pp; English.  
 CC  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 3 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4538 TTGGACTCCAAAAGAAA 4556  
 Db 1 TTGGACTCCAAAAGAAA 19  
 RESULT 2073  
 ADR75862  
 ID ADR75862 standard; DNA; 19 BP.  
 AC ADR75862;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 347.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyrostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 347; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3638 TGAAGAGAGATTGAATTT 3656  
 |||||  
 Db 1 TGAAGAGAGATTGAATTT 19  
 |||||  
 RESULT 2074  
 ADR75919  
 ID ADR75919 standard; DNA; 19 BP.  
 XX  
 AC ADR75919;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 404.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 404; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1041 AAGATGGGCTCGCATTTG 1059  
 Db |||||  
 1 AAGATGGGCTCGCATTTG 19  
 RESULT 2075  
 ADR75963  
 ID ADR75963 standard; DNA; 19 BP.  
 XX  
 AC ADR75963;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 448.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 448; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 0 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1960 TGAAGTGTAGTGAAGA 1978  
 Db |||||  
 1 TGAAGTGTAGTGAAGA 19  
 RESULT 2076  
 ADR75976  
 ID ADR75976 standard; DNA; 19 BP.  
 XX  
 AC ADR75976;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 461.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX

OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 461; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2263 CAGACAGTGTCAACAAAGC 2281  
 ||||||||||||||||

Db 1 CAGACAGTGTCAACAAAGC 19  
 RESULT 2077  
 ADR75978  
 ID ADR75978 standard; DNA; 19 BP.  
 XX ADR75978;  
 AC ADR75978;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 463.  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 463.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465865P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 463; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;  
 SQ Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2263 CAGACAGTGTCAACAAAGC 2281  
 ||||||||||||||||

CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2268 AGTGTCAACAAAGCTTTGT 2286

Db 1 AGTGTCAACAAAGCTTTGT 19

RESULT 2078

ADR75993

ID ADR75993 standard; DNA; 19 BP.

AC ADR75993;

XX ADR75993;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 478.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469622P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 478; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2636 TGAACCTCCCACTGGAGCT 2654

Db 1 TGAACCTCCCACTGGAGCT 19

RESULT 2079

ADR75997

ID ADR75997 standard; DNA; 19 BP.

AC ADR75997;

XX ADR75997;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 482.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469622P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PD 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 482; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2663 GTTGCAATATCTTCATCT 2681  
 Db 1 GTTGCAATATCTTCATCT 19  
 RESULT 2080

ADR76002  
 ID ADR76002 standard; DNA; 19 BP.  
 XX  
 AC ADR76002;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 487.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 487; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX



CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 5 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2776 TTGTGACAAATATGGGCAT 2794  
 DB 1 TTTGACAAATATGGGCAT 19  
 RESULT 2081  
 ADR76022  
 ID ADR76022 standard; DNA; 19 BP.  
 XX  
 AC ADR76022;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 507.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 FA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 507; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3513 TTGCAGCAGCAGCCAGAA 3531  
 DB 1 TTGCAGCAGCAGCCAGAA 19

RESULT 2082  
 ADR76067  
 ID ADR76067 standard; DNA; 19 BP.  
 XX  
 AC ADR76067;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 552.  
 XX

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.

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PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-MAR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 08-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0506341P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 552; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.18; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4883 CAAGATGGATGATGACCTTC 4901
DB 1 CAAGATGGATGATGACCTTC 19
XX
RESULT 2083
AD76254
ID AD76254 standard; DNA; 19 BP.
XX
AC AD76254;

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XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 739.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 739; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.18; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 4883 CAAGATGGATGATGACCTTC 4901
DB 1 CAAGATGGATGATGACCTTC 19
XX
RESULT 2083
AD76254
ID AD76254 standard; DNA; 19 BP.
XX
AC AD76254;

```

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 482 CTCTGAGGAGTTTGCTGCA 500  
 |||||  
 Db 1 CTCTGAGGAGTTTGCTGCA 19

## RESULT 2084

ADR76256  
 ID ADR76256 standard; DNA; 19 BP.

XX AC ADR76256;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 741.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX PD 08-MAR-2004; 2004WO-US007070.

XX PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX FI Manoharan M, Bumcrot D;

XX DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 741; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphate levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 840 CTGATCAGCAGCAGCCAGT 858  
 |||||

Db 1 CTGATCAGCAGCAGCCAGT 19

## RESULT 2085

ADR76275

ID ADR76275 standard; DNA; 19 BP.

XX AC ADR76275;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 760.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

XX PD 08-MAR-2004; 2004WO-US007070.

XX PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

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PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 29-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 760; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e-02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2580 AGGAAGGGCTCAAGGATG 2598
Db 1 AGGAAGGGCTCAAGGATG 19
|||||
RESULT 2086
ADRT6300
ID ADRT6300 standard; DNA; 19 BP.
XX
AC ADRT6300;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 785.

```

antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscula; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-0454265P.

13-MAR-2003; 2003US-0454962P.

13-MAR-2003; 2003US-0455050P.

14-APR-2003; 2003US-0462894P.

17-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

25-APR-2003; 2003US-0465802P.

09-MAY-2003; 2003US-0469612P.

08-AUG-2003; 2003US-0493986P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemia, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 760; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e-02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2580 AGGAAGGGCTCAAGGATG 2598

Db 1 AGGAAGGGCTCAAGGATG 19

|||||

RESULT 2086

ADRT6300

ID ADRT6300 standard; DNA; 19 BP.

XX

AC ADRT6300;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 785.

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 CCGGACCTCGGGCTGAG 27

Db 1 CCGGACCTCGGGCTGAG 19

RESULT 2087

ADR76324

ID ADR76324 standard; DNA; 19 BP.

XX ADR76324;

AC ADR76324;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 809.

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 809; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 10 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 463 TGCTGAAGAAACCAAGAA 481

Db 1 TGCTGAAGAAACCAAGAA 19

RESULT 2088

ADR76332

ID ADR76332 standard; DNA; 19 BP.

XX ADR76332;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 817.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 817; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100. Elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 585 ATCTGAACTCAAGAGGG 603  
 |||||  
 Db 1 ATCTGAACTCAAGAGGG 19  
 RESULT 2089  
 ADR76343  
 ID ADR76343 standard; DNA; 19 BP.  
 XX  
 AC ADR76343;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 828.  
 XX  
 DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 828; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100. Elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 690 ACTCAGTTTACCGTCAAGA 708
DB 1 ACTCAGTTTACCGTCAAGA 19

RESULT 2090
ID ADR76357
AC ADR76357
XX
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 842.
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
XX
XX 23-SEP-2004.
XX
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 842; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or Glucose-6-phosphatase levels in a subject; producing (I);

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CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

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```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02; 0; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 0;

QY 913 AGGAGCAACACCTCTTCCT 931
DB 1 AGGAGCAACACCTCTTCCT 19

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RESULT 2091
ADR76390
ID ADR76390 standard; DNA; 19 BP.
XX
XX
XX ADR76390;
XX
XX 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 875.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.

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PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 875; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1510 AGGAGCTGCTGGACATTGC 1528
Db 1 AGGAGCTGCTGGACATTGC 19
|||||
RESULT 2092
ADR76417
ID ADR76417 standard; DNA; 19 BP.
XX
AC ADR76417;
XX
DT 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 902.
DE
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

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KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 902; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 1897 AGAAGTTTGGCTTCCCA 1915  
 Db 1 AGAAGTTTGGCTTCCCA 19

RESULT 2093  
 ADR76425  
 ID ADR76425 standard; DNA; 19 BP.  
 AC ADR76425;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 910.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 910; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1959 CTGAAAAGTTAGTGAAG 1977

Db 1 CTGAAAAGTTAGTGAAG 19

RESULT 2094

ADR76430

ID ADR76430 standard; DNA; 19 BP.

AC ADR76430;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 915.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.

PA	(ALNY-) ALNYLAM PHARM.
XX	
PX	Manoharan M, Bumcrot D;
PI	WPI; 2004-677362/66.
PD	
PP	08-MAR-2004; 2004WO-US007070.
XX	
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.
PS	Example 5; SEQ ID NO 915; 378pp; English.
XX	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.
XX	
SQ	Sequence 19 BP; 6 A; 5 C; 1 G; 7 T; 0 U; 0 Other;
	Query Match 0.1%; Score 19; DB 1; Length 19;
	Best Local Similarity 100.0%; Pred. No. 6e+02;
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	2041 AACCTACAAATCTGTTTC 2059 
DB	1 AACCTACAAATCTGTTTC 19
RESULT 2095	
ADR76450	
ID	ADR76450 standard; DNA; 19 BP.
IX	
AD	ADR76450;
AC	
XX	
DT	16-DEC-2004 (first entry)
XX	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 935.
XX	
KW	antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticoagulant; nootropic; muscula; anti-HIV;
KW	RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW	coronary artery disease; CAD; coronary heart disease; CHD;
KW	atherosclerosis; hepatic glucose production;
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW	colon cancer; lung cancer; neurological disease; Huntington disease;
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX	
SS	Homo sapiens.

RESULT 2096  
 ADR76468  
 ID ADR76468 standard; DNA; 19 BP.  
 XX  
 AC ADR76468;  
 DT  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 953.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 953; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 2493 CTCCTGACCTCCAGCTCC 2511  
 Db 1 CTCCTGACCTCCAGCTCC 19

RESULT 2097  
 ADR76474  
 ID ADR76474 standard; DNA; 19 BP.  
 XX  
 AC ADR76474;  
 DT  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 959.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0469612P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 953; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or

DR WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 959; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2618 CTTTCATGGAGATGCCTTT 2636  
 DB 1 CTTTCATGGAGATGCCTTT 19  
 RESULT 2098  
 ADR76478  
 ID ADR76478 standard; DNA; 19 BP.  
 XX ADR76478;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 963.  
 DE  
 XX anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; as.  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 963; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 8 A; 1 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2708 TGGAGTAAACTGGAAGTA 2726  
 DB 1 TGGAGTAAACTGGAAGTA 19  
 RESULT 2099  
 ADR76484

ID ADR76484 standard; DNA; 19 BP.  
 AC ADR76484;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 969.  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR  
 PR 14-APR-2003; 2003US-0462894P.  
 PR  
 PR 17-APR-2003; 2003US-0463772P.  
 PR  
 PR 25-APR-2003; 2003US-0465665P.  
 PR  
 PR 25-APR-2003; 2003US-0465802P.  
 PR  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 969; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 68+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2844 TTCACGAGTCCGGTCTGG 2862  
 DB 1 TTCACGAGTCCGGTCTGG 19  
 RESULT 2100  
 ADR76504  
 ID ADR76504 standard; DNA; 19 BP.  
 XX  
 AC ADR76504;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 989.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR  
 PR 14-APR-2003; 2003US-0462894P.  
 PR  
 PR 17-APR-2003; 2003US-0463772P.  
 PR  
 PR 25-APR-2003; 2003US-0465665P.  
 PR  
 PR 25-APR-2003; 2003US-0465802P.  
 PR  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 969; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant

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sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 989; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apob-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3243 GCAGAGGTCGACGAGCAGA 3261
DB 1 GCAGAGGTCGACGAGCAGA 19
|||||
|||||

RESULT 2101
ADR76515
ID ADR76515 standard; DNA; 19 BP.
XX
AC ADR76515;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1000.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.

sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 989; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apob-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3243 GCAGAGGTCGACGAGCAGA 3261
DB 1 GCAGAGGTCGACGAGCAGA 19
|||||
|||||

RESULT 2101
ADR76515
ID ADR76515 standard; DNA; 19 BP.
XX
AC ADR76515;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1000.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.

sequence and antisense sequence which has specific modifications.
Example 5; SEQ ID NO 1000; 378pp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a
sense sequence and an antisense sequence, where the sense sequences have
one or more asymmetrical 2'-O alkyl modifications, the antisense
sequences have one or more asymmetrical phosphorothioate modifications
and the antisense sequence targets a human gene sequence. Also described
are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
levels or glucose-6-phosphatase levels in a subject; producing (I);
stabilising (I), involves selecting a sequence with activity and
introducing one or more asymmetrical modification in the sequence, where
the modification decreases nuclease sensitivity while not decreasing its
activity; a kit comprising (I) and instruction for its use; and a device
that can be dispense or administer a composition comprising (I). (I) is
useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
The subject is suffering from a disorder characterised by elevated or
otherwise unwanted expression of apob-100, elevated or otherwise unwanted
levels of cholesterol, and/or dysregulation of lipid metabolism. The
disorder is chosen from the HDL/LDL cholesterol imbalance,
dyslipidaemias, hypercholesterolaemia, statin-resistant
disease (CHD) and atherosclerosis. (I) is administered to a subject to
inhibit hepatic glucose production or for treating glucose-metabolism-
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
treating the diseases as mentioned above, cancer (e.g. breast, colon or
lung cancer), neurological disease (e.g., Huntington disease or
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
can be used to control ApoB gene expression.

Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match      0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3459 AGTTGTGACACAAAGGAAG 3477
DB 1 AGTTGTGACACAAAGGAAG 19
|||||
|||||

RESULT 2102
ADR76582
ID ADR76582 standard; DNA; 19 BP.
XX
AC ADR76582;
XX

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DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1067.

DE antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

XX Example 5; SEQ ID NO 1067; 378pp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

CC

XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

SQ

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4389 TCATGTCATGGTCTCTAC 4407

Db 1 TCATGTCATGGTCTCTAC 19

RESULT 2103

ADR76648

ID ADR76648 standard; DNA; 19 BP.

XX

AC ADR76648;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1133.

XX

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004WO-US007070.

XX

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

XX Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

XX Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX

XX Example 5; SEQ ID NO 1133; 378pp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2735 GCAGGCTGAACCTGGTGCCA 2753  
 Db 1 GCAGGCTGAACCTGGTGCCA 19

RESULT 2104

ADR76726  
 ID ADR76726 standard; DNA; 19 BP.

XX ADR76726;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 1211.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1211; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4852 ATGGGAAGTATAGAACTT 4870

Db 1 ATGGGAAGTATAGAACTT 19

RESULT 2105

ADR76891

ID ADR76891 standard; DNA; 19 BP.

XX ADR76891;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1376.



KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX  
 XX  
 CC Example 5; SEQ ID NO 1376; 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation targets a human gene sequence. Also described  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease, (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4746 GGAACCCCTCTCCCTCACCT 4764

Db 1 GGAACCCCTCTCCCTCACCT 19

RESULT 2106

ADR76893

ID ADR76893 standard; DNA; 19 BP.

XX

AC ADR76893;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1378.

XX

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.

XX

PN WO2004080406-A2.

XX

PD 23-SEP-2004.

XX

PF 08-MAR-2004; 2004WO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR

PR 12-MAR-2003; 2003US-0454265P.

PR

PR 13-MAR-2003; 2003US-0454962P.

PR

PR 13-MAR-2003; 2003US-0455050P.

PR

PR 14-APR-2003; 2003US-0462894P.

PR

PR 17-APR-2003; 2003US-0463772P.

PR

PR 25-APR-2003; 2003US-0465665P.

PR

PR 25-APR-2003; 2003US-0465802P.

PR

PR 09-MAY-2003; 2003US-0469612P.

PR

PR 08-AUG-2003; 2003US-0493986P.

PR

PR 11-AUG-2003; 2003US-0494597P.

PR

PR 26-SEP-2003; 2003US-0506341P.

PR

PR 09-OCT-2003; 2003US-0510246P.

PR

PR 10-OCT-2003; 2003US-0510318P.

PR

PR 07-NOV-2003; 2003US-0518453P.

XX

PA (ALNY-) ALNYLAM PHARM.

XX

PI Manoharan M, Bumcrot D;

XX

XX WPI; 2004-677362/66.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX  
 XX  
 CC Example 5; SEQ ID NO 1378; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequence  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3279 TTCAATATATATCGGCGAGA 3297  
 Db 1 TTCAATATATATCGGCGAGA 19

RESULT 2107  
 ID ADR76908 standard; DNA; 19 BP.  
 XX  
 AC ADR76908;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1393.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1393; 378pp; English.

XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2948 CACATTACATTGGTCTCT 2966  
 Db 1 CACATTACATTGGTCTCT 19

RESULT 2108  
 ADR77172  
 ID ADR77172 standard; DNA; 19 BP.  
 XX  
 AC ADR77172;  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1657.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1657; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e-02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4829 GCTGACTTTAAATCTGAC 4847  
 DB 1 GCTGACTTTAAATCTGAC 19  
 RESULT 2109  
 ADR77320  
 ID ADR77320 standard; DNA; 19 BP.  
 XX  
 AC ADR77320;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1805.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1805; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 2 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 GCTGGAGTAAACTGGAAG 2724  
 |||||  
 Db 1 GCTGGAGTAAACTGGAAG 19

RESULT 2110  
 ADNR77344  
 ID ADNR77344 standard; DNA; 19 BP.  
 XX  
 AC ADNR77344;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1829.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1829; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2938 GTGGAGGCAACACATTACA 2956  
 |||||  
 Db 1 GTGGAGGCAACACATTACA 19

RESULT 2111  
 ADNR77351  
 ID ADNR77351 standard; DNA; 19 BP.  
 XX  
 AC ADNR77351;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1836.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX DR WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1336; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2486 TGCCAGTCTCCATGACCTC 2504  
 DB |||||  
 1 TGCCAGTCTCCATGACCTC 19  
 RESULT 2112  
 ADR77392  
 ID ADR77392 standard; DNA; 19 BP.  
 XX AC ADR77392;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1877.  
 XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.  
 XX PI Manoharan M, Bumcrot D;  
 XX DR WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1877; 378pp; English.  
 XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC the subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4670 CAATGAGAGTCCAACTG 4688  
 Db 1 CAATGAGAGTCCAACTG 19  
 RESULT 2113  
 ADR77417  
 ID ADR77417 standard; DNA; 19 BP.  
 XX AC ADR77417;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1902.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1902; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4552 AGAAACAGCATTGTTTGT 4570  
 Db 1 AGAAACAGCATTGTTTGT 19  
 RESULT 2114  
 ADR77484  
 ID ADR77484 standard; DNA; 19 BP.  
 XX AC ADR77484;  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1969.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS

PN WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1969; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Query Match 0.1%; Score 19; DB 1; Length 19;  
 XX Best Local Similarity 100.0%; Pred. No. 6e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 4395 GATGGGTCTTACGCCACA 4413  
 DB 1 GATGGGTCTTACGCCACA 19

RESULT 2115  
 ADR77488  
 ID ADR77488 standard; DNA; 19 BP.  
 XX AC ADR77488;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1973.  
 XX KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 1973; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4817 TGAGAACTACGAGTGACT 4835

Db 1 TGAGAACTACGAGTGACT 19

RESULT 2116

ADRT7526

ID ADR77526 standard; DNA; 19 BP.

XX AC ADR77526;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2011.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US0007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 13-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2011; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequences have  
 one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I), involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nuclease sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispense or administer a composition comprising (I). (I) is  
 useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidaemias, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control ApoB gene expression.

SQ Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4006 GTTGAATTCGAGTTCC 4024

Db 1 GTTGAATTCGAGTTCC 19

RESULT 2117

ADRT7528

ID ADR77528 standard; DNA; 19 BP.

XX AC ADR77528;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2013.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticongulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX





CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4084 CAGCCCTCCACTCAAGTC 4102  
 DB 1 CAGCCCTCCACTCAAGTC 19

RESULT 2119  
 ADR77541  
 ID ADR77541 standard; DNA; 19 BP.  
 XX  
 AC ADR77541;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2026.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465685P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX  
 XX Example 5; SEQ ID NO 2026; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4301 GAAGGCTGACTCTGTGTT 4319  
 DB 1 GAAGGCTGACTCTGTGTT 19

RESULT 2120  
 ADR77544  
 ID ADR77544 standard; DNA; 19 BP.  
 XX  
 AC ADR77544;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2029.  
 XX  
 KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cystostatic; anticonvulsant; nootropic; musculla; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 23-APR-2003; 2003US-0465685P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2029; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4323 CTGCTTTTCCTACATGTGC 4341  
 Db 1 CTGCTTTTCCTACATGTGC 19  
 RESULT 2121  
 ADR77559  
 ID ADR77559 standard; DNA; 19 BP.  
 XX  
 AC ADR77559;  
 XX  
 DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2044.  
 DE  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0469612P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2044; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX

```
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 2 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4596 TTCAGAGTCTTCGTTCT 4614
Db 1 TTCAGAGTCTTCGTTCT 19

RESULT 2122
ID ADR77561
XX ADR77561 standard; DNA; 19 BP.
AC ADR77561;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2046.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 18-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2046; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
```

```
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4615 ATGCTAAGGCACATATGG 4633
Db 1 ATGCTAAGGCACATATGG 19

RESULT 2123
ADR77920
ID ADR77920 standard; DNA; 19 BP.
XX
AC ADR77920;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2405.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 18-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2046; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
```

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2405; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1098 GCTGTTTTGAAGACTCTCC 1116  
 Db 1 GCTGTTTTGAAGACTCTCC 19  
 RESULT 2124  
 AD78190  
 ID AD78190 standard; DNA; 19 BP.  
 XX  
 AC AD78190;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2675.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX W02004080406-A2.  
 FN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 28-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2675; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 3 A; 5 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1098 GCTGTTTTGAAGACTCTCC 1116  
 Db 1 GCTGTTTTGAAGACTCTCC 19  
 RESULT 2124  
 AD78190  
 ID AD78190 standard; DNA; 19 BP.  
 XX  
 AC AD78190;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2675.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW

```

XX SQ Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2902 TCATTCTTCCCAAGAG 2920
Db 1 TCATTCTTCCCAAGAG 19

RESULT 2125
ADR78197
XX ADR78197 standard; DNA; 19 BP.
AC ADR78197;
DT 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2682.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX Homo sapiens.
OS WO2004080406-A2.
PN 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 26-SEP-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 2682; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

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CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX Sequence 19 BP; 11 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3678 GTAGATACCAAAAATGA 3696
Db 1 GTAGATACCAAAAATGA 19

RESULT 2126
ADR78254
XX ADR78254 standard; DNA; 19 BP.
XX 16-DEC-2004 (first entry)
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2739.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX Homo sapiens.
OS WO2004080406-A2.
PN 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 26-SEP-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX (ALNY-) ALNYLAM PHARM.
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 2682; 378pp; English.
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described

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PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2739; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 0 A; 7 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 ID Best Local Similarity 100.0%; Pred. NO. 6e+02;  
 AC Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 164 GGGCGCTGCCGCTGGCTG 182  
 Db 1 GGGCGCTGCCGCTGGCTG 19  
 RESULT 2127  
 ADR78272  
 ID ADR78272 standard; DNA; 19 BP.  
 AC  
 XX ADR78272;  
 AC  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2757.  
 DE  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US0007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2757; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 478 AGAAGCTGAGAGTTTC 496  
Db 1 AGAAGCTGAGAGTTTC 19

RESULT 2128  
ADR78275

ID ADR78275 standard; DNA, 19 BP.

AC ADR78275;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2760.

KM antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytoskeletal; anticonvulsant; nootropic; muscular; anti-HIV;  
KM RNA interference; iRNA; antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004MO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 2760; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I); involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SO Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 596 CAAGAGCGCATCATTTCT 614  
Db 1 CAAGAGCGCATCATTTCT 19

RESULT 2129

ID ADR78281 standard; DNA, 19 BP.

AC ADR78281;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2766.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytoskeletal; anticonvulsant; nootropic; muscular; anti-HIV;  
KM RNA interference; iRNA; antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004MO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemia, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2766; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyi modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemia, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 977 ACAGACTTGAACTTGAA 995
XX | | | | | | | | | | | | | | | | | | | |
XX 1 ACAGACTTGAACTTGAA 19
XX
XX RESULT 2130
XX ADR78283
XX ID ADR78283 standard; DNA, 19 BP.
XX
XX AC ADR78283;
XX
XX 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2766.
XX
XX KM antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX KM RNA interference; iRNA; antisense technology; lipid metabolism;
XX KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX KM coronary artery disease; CAD; coronary heart disease; CHD;
XX KM atherosclerosis; hepatic glucose production;
XX KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX KM colon cancer; lung cancer; neurological disease; Huntington disease;
XX KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

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XX
XX Homo sapiens.
XX
XX OS
XX
XX W02004080406-A2.
XX
XX
XX 23-SEP-2004.
XX
XX
XX 08-MAR-2004; 2004MO-US007070.
XX
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454285P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemia, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2766; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyi modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemia, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1211 ACAGTCACATCTCTCTTG 1229

```

Db 1 AGCAGTCACATCTCTCTTG 19

RESULT 2131

ADR78286 standard; DNA; 19 BP.

ADR78286;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 2771.

antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; tRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454285P.  
13-MAR-2003; 2003US-0454962P.  
14-MAR-2003; 2003US-0455050P.  
15-MAR-2003; 2003US-0462894P.  
16-MAR-2003; 2003US-0463772P.  
17-MAR-2003; 2003US-0465665P.  
18-MAR-2003; 2003US-0465802P.  
19-MAR-2003; 2003US-0469612P.  
20-MAR-2003; 2003US-0493986P.  
21-MAR-2003; 2003US-0494597P.  
22-MAR-2003; 2003US-0506341P.  
23-MAR-2003; 2003US-0510246P.  
24-MAR-2003; 2003US-0510318P.  
25-MAR-2003; 2003US-0518453P.

(ALNY-) ALNYLIAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidaemia, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.  
Example 5; SEQ ID NO 2771; 378bp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apoB-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemia, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 66+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1332 CATGCCAACCCCTTCTGA 1350

Db 1 CATGCCAACCCCTTCTGA 19

RESULT 2132

ADR78298 standard; DNA; 19 BP.

ADR78298;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 2783.

antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; tRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454285P.  
13-MAR-2003; 2003US-0454962P.  
14-MAR-2003; 2003US-0455050P.  
15-MAR-2003; 2003US-0462894P.  
16-MAR-2003; 2003US-0463772P.  
17-MAR-2003; 2003US-0465665P.  
18-MAR-2003; 2003US-0465802P.  
19-MAR-2003; 2003US-0469612P.  
20-MAR-2003; 2003US-0493986P.  
21-MAR-2003; 2003US-0494597P.  
22-MAR-2003; 2003US-0506341P.  
23-MAR-2003; 2003US-0510246P.  
24-MAR-2003; 2003US-0510318P.  
25-MAR-2003; 2003US-0518453P.

(ALNY-) ALNYLIAM PHARM.

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2783; 378bp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
SQ Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1982 TCTGAAGAATCTCACTT 2000
Db 1 TCTGAAGAATCTCACTT 19
XX
RESULT 2133
ADR78331
ID ADR78331 standard; DNA; 19 BP.
XX
AC ADR78331;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2816.
XX
KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosaric; anticoagulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.

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XX
PD 23-SEP-2004.
XX
XX 08-MAR-2004; 2004MO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-MAR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2816; 378bp; English.
XX
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
SQ Sequence 19 BP; 4 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 3693 ATGACTTCCAAATTTCCCTG 3711
Db 1 ATGACTTCCAAATTTCCCTG 19

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RESULT 2134  
 ADR78337  
 ID ADR78337 standard; DNA; 19 BP.  
 XX  
 AC ADR78337:  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2822.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 2822; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modifications in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0;  
 Db 3957 CTCCTTTTAAAAAGCGATG 3975  
 1 CTCCTTTTAAAAAGCGATG 19  
 RESULT 2135  
 ADR78478  
 ID ADR78478 standard; DNA; 19 BP.  
 XX  
 AC ADR78478:  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2963.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX

```

PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2963; 378bp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I1)
CC stabilising (I1), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological diseases (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
SQ Sequence 19 BP; 5 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 2257 TTTTCCGACAGTGTCAA 2275
Db 1 TTTTCCGACAGTGTCAA 19
RESULT 2136
ADR78479 standard; DNA; 19 BP.
XX
AC ADR78479;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2964.
XX
KM antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KM cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;
KM RNA interference; iRNA; antisense technology; lipid metabolism;
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KM coronary artery disease; CAD; coronary heart disease; CHD;
KM atherosclerosis; hepatic glucose production;
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KM colon cancer; lung cancer; neurological disease; Huntington disease;
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.

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XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 05-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494579P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNTIAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2964; 378bp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I1)
CC stabilising (I1), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological diseases (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
SQ Sequence 19 BP; 10 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 3413 CATTGAGACAGAAATTT 3431
Db 1 CATTGAGACAGAAATTT 19
RESULT 2137
ADR78508 standard; DNA; 19 BP.
XX

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AC ADR78508;  
 XX 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2993.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2993; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC created disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 388 TCTGCAGCTTCATCCGGA 406  
 Db 1 TCTGCAGCTTCATCCGGA 19  
 RESULT 2138  
 ADR78540  
 ID ADR78540 standard; DNA; 19 BP.  
 AC ADR78540;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3025.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX

```

PS Example 5; SEQ ID NO 3025; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 11 A; 4 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1120 AACTGAAAAAATAACCT 1138
Db 1 AACTGAAAAAATAACCT 19

RESULT 2139
ID ADR78549 standard; DNA; 19 BP.
XX ADR78549;
AC
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3034.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.

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PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (AINTY-) ALNTIAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI: 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3034; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 3 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1221 TCTCTTTTCCACAGCTGA 1239
Db 1 TCTCTTTTCCACAGCTGA 19

RESULT 2140
ID ADR78554 standard; DNA; 19 BP.
XX ADR78554;
AC
XX 16-DEC-2004 (first entry)
XX

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one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); stabilising (I); involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Query Match	0.1%	Score 19;	DB 1;	Length 19;
Best Local Similarly	100.0%	Pred. No. 6e+02;		
Matches 19; Conservative	0;	Mismatches	0;	Indels 0
				Gaps 0

QY		2078 AGCCTCAGCCAAATAGAA	2096
Dd	1	AGCCTCAGCCAAATAGAA	19

RESULT 2142  
ADR78596  
ID ADR78596 standard; DNA; 19 BP.

AC ADR78596;  
XX  
DT 16-DEC-20

DT	16-DEC-2004	(first entry)
XX		
DE	Human apolipoprotein B (ApoB)	
XX		

Human apolipoprotein B (ApoB) oligonucleotide seqid 3081

KM antiinflammatory; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytosolic; anticoagulant; nootropic; muscular; anti-HIV;  
KM RNA interference; IRNA, antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004

PF 08-MAR-2004; 2004WO-US007070.

PR	07-MAR.-2003	2003US-0452682P
PR	12-MAR.-2003	2003US-0454265P
PR	13-MAR.-2003	2003US-0454962P
PR	13-MAR.-2003	2003US-0455050P
PR	14-APR.-2003	2003US-04628894P
PR	17-APR.-2003	2003US-0463772P
PR	25-APR.-2003	2003US-04656652P

PR 25-APR-2003; 2003US-0465802P  
PR 09-MAY-2003; 2003US-0463612P  
PR 08-AUG-2003; 2003US-0493986P  
PR 11-AUG-2003; 2003US-0494597P  
PR 26-SEP-2003; 2003US-0506341P  
PR 09-OCT-2003; 2003US-0510246P  
PR 10-OCT-2003; 2003US-0510318P  
PR 07-NOV-2003; 2003US-0518453P

PA (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

DR WPI: 2004-677362/66

PT Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3081; 378bp; English

The invention describes a RNA interference (RNAi) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequence have one or more asymmetrical 2'-O-alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I1) stabilising (I1), involve selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterized by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological diseases (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 6 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match	0.1%;	Score 19;	DB 1;	Length 19;
Best Local Similarity	100.0%;	Pred. No. 6e+02;		
Matches 19;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

```
QY      2268 AGTGTCAACAAGCTTTGT 2286
          |||||
Db      1 AGTGTCAACAAGCTTTGT 19
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RESULT 2143

ID	ADR78598	standard; DNA; 19 BP
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2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
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22	22	22
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24	24	24
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82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
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90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

AC ADR78598 ;

DT 16-DEC-2004 (first entry

Human apolipoprotein B (ApoB) oligonucleotide seqid 3083.

KM antilipemic; cardiast; vasotrophic; antiarteriosclerotic; antidiabetic  
KM antilipemic; cardiast; vasotrophic; antiarteriosclerotic; antidiabetic  
KM cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;

KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3083; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQL Sequence 19 BP; 3 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2309 TGATGTCCTCTTAAGTTC 2327  
 Db 1 TGATGTCCTCTTAAGTTC 19  
 RESULT 2144  
 ADR78617  
 ID ADR78617 standard; DNA; 19 BP.  
 XX  
 AC ADR78617;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3102.  
 XX  
 KM antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3102; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

CC Sequence 19 BP; 9 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

2713 TAAACTGAGTAGCCAA 2731

1 TAAACTGAGTAGCCAA 19

RESULT 2145

ADR78632

ID ADR78632 standard; DNA; 19 BP.

AC ADR78632;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 3117.

KM antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.

MO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-045265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-049612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNY-) ALNYLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3117, 378pp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

CC Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

3347 CGGACAAATCCAGAGTT 3365

1 CGGACAAATCCAGAGTT 19

RESULT 2146

ADR78656

ID ADR78656 standard; DNA; 19 BP.

AC ADR78656;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 3141.

KM antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 PF 08-MAR-2004; 2004WO-US007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNTY-) ALNTIAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 PT WPI; 2004-677362/66.  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3141; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I1)  
 CC stabilising (I1), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I1). (I1) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I1) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I1) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 3813 AAATTAATAGTGCATGA 3831  
 Db 1 AAATTAATAGTGCATGA 19  
 RESULT 2147  
 ADR78892  
 ID ADR78892 standard; DNA; 19 BP.  
 AC ADR78892;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (apob) oligonucleotide seqid 3377.  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 PD 23-SEP-2004.  
 PF 08-MAR-2004; 2004WO-US007070.  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 PA (ALNTY-) ALNTIAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 PT WPI; 2004-677362/66.  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3377; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I1)  
 CC stabilising (I1), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its

activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, CC dyslipidaemia, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (Apob) antisense oligonucleotide that can be used to control Apob gene expression.

Sequence 19 BP; 7 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

2427 TCCTCAAGATCCCGAAG 2445  
1 TCCTCAAGATCCCGAAG 19

RESULT 2148

ADR78928 standard; DNA; 19 BP.

ADR78928;

16-DEC-2004 (first entry)

Human apolipoprotein B (Apob) oligonucleotide seqid 3384.

antihypertensive; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.

MO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004MO-US007070.

07-MAR-2003; 2003US-0452682P.

12-MAR-2003; 2003US-045265P.

13-MAR-2003; 2003US-0454962P.

14-APR-2003; 2003US-0455050P.

17-APR-2003; 2003US-0462894P.

25-APR-2003; 2003US-0463772P.

25-APR-2003; 2003US-0465665P.

09-MAY-2003; 2003US-0465802P.

08-AUG-2003; 2003US-0493968P.

11-AUG-2003; 2003US-0494597P.

26-SEP-2003; 2003US-0506341P.

09-OCT-2003; 2003US-0510246P.

10-OCT-2003; 2003US-0510318P.

07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

DR Example 5; SEQ ID NO 3384; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance, CC dyslipidaemia, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that can be used to control Apob gene expression.

XX Sequence 19 BP; 4 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;

3693 ATGACTTCCCAATTTCCCTG 3711  
1 ATGACTTCCCAATTTCCCTG 19

RESULT 2149

ADR78928 standard; DNA; 19 BP.

ADR78928;

16-DEC-2004 (first entry)

Human apolipoprotein B (Apob) oligonucleotide seqid 3413.

antihypertensive; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticonvulsant; nootropic; muscular; anti-HIV; RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3413; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 Query March 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 307 GTTCAGTGGAGTCCCTGG 325  
 ||||||||||||||||

DB 1 GTTCAGTGGAGTCCCTGG 19  
 RESULT 2150  
 ADR78939  
 ID ADR78939 standard; DNA; 19 BP.  
 XX  
 XX ADR78939;  
 AC  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3424.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3424; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

CC Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 440 CTTCAACCTGAGGCGAAA 458  
DB 1 CTTCAACCTGAGGCGAAA 19

RESULT 2151  
ADR78941

ID ADR78941 standard; DNA; 19 BP.

AC ADR78941;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3426.

XX antihypertensive; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX MO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX (ALIN)- ALINYIAM PHARM.  
XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprising sense  
XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3426; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 4 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 461 CTTGCTGAGAAACCAAG 479  
DB 1 CTTGCTGAGAAACCAAG 19

RESULT 2152

ADR78944

ID ADR78944 standard; DNA; 19 BP.

AC ADR78944;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3429.

XX antihypertensive; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX MO2004080406-A2.

PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3429; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 494 TGCTGCAGCCATGTCACG 512  
 |||||  
 DB 1 TGCTGCAGCCATGTCACG 19  
 RESULT 2153

ADR78961  
 ID ADR78961 standard; DNA; 19 BP.  
 XX  
 AC ADR78961;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3446.  
 XX  
 KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3446; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,



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CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 690 ACTCAGTTACCGTCAGCA 708
Db 1 ACTCAGTTACCGTCAGCA 19

RESULT 2154
ADR78962
ID ADR78962 standard; DNA, 19 BP.
XX
AC ADR78962;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3447.
XX
KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0452894P.
PR 17-APR-2003; 2003US-0453772P.
PR 25-APR-2003; 2003US-0455655P.
PR 25-APR-2003; 2003US-0455802P.
PR 09-MAY-2003; 2003US-0459612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
DR WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidaemias, coronary artery

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PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3447; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instructions for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
SQ Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 695 CTTTACCGTCAGACGAGG 713
Db 1 CTTTACCGTCAGACGAGG 19

RESULT 2155
ADR78971
ID ADR78971 standard; DNA, 19 BP.
XX
AC ADR78971;
XX
DT 16-DEC-2004 (first entry)
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3456.
XX
KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX

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PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 3456; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 793 TCAGCCCACTGCTCTCAT 811  
 Db 1 TCAGCCCACTGCTCTCAT 19  
 RESULT 2156  
 ADR78981  
 ID ADR78981 standard; DNA; 19 BP.  
 XX  
 AC ADR78981;

XX  
 DT 16-DEC-2004. (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3466.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 3466; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 965 AGCACAGTGCACAGACT 983

Db 1 AGCACAGTGCACAGACT 19

RESULT 2157

ADR79000

ID ADR79000 standard; DNA; 19 BP.

AC ADR79000;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3485.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454963P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494379P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYTAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3485; 378bp; English.

XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I); involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred.No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1241 TGAGTGTCGAGCCCATC 1259

Db 1 TGAGTGTCGAGCCCATC 19

RESULT 2158

ADR79017

ID ADR79017 standard; DNA; 19 BP.

AC ADR79017;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3502.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.



CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1683 CCATCAGTATGATCCAG 1701  
 1 CCATCAGTATGATCCAG 19

RESULT 2160  
 ID ADR79030  
 ADR79030 standard; DNA; 19 BP.  
 XX ADR79030;  
 AC ADR79030;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3515.

KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytoskeletal; anticoagulant; neurotropic; muscular; anti-HIV;  
 KM RNA interference; lRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PE 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 3515; 378bp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1841 GGCGATATTAAACAAATT 1859  
 1 GGCGATATTAAACAAATT 19

RESULT 2161  
 ID ADR79031  
 ADR79031 standard; DNA; 19 BP.  
 XX ADR79031;  
 AC ADR79031;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3516.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytoskeletal; anticoagulant; neurotropic; muscular; anti-HIV;  
 KM RNA interference; lRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PE 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3516; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SO Sequence 19 BP; 9 A; 3 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 1846 ATATTACAAATGTCGA 1864  
 Db 1 ATATTACAAATGTCGA 19  
 RESULT 2162  
 ADR79035  
 ID ADR79035 standard; DNA; 19 BP.  
 XX  
 AC ADR79035;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3520.  
 XX  
 KM anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3520; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SO Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1897 AGAAGCTTTGTGGCTTCCCA 1915  
 |||||  
 1 AGAAGCTTTGTGGCTTCCCA 19

RESULT 2163  
 ID ADR79051 standard; DNA; 19 BP.  
 ADR79051;  
 16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 3536.  
 antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 08-MAY-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 3536; 378bp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

Sequence 19 BP; 6 A; 1 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

2094 GAAGGGAATTTATATTG 2112  
 |||||  
 1 GAAGGGAATTTATATTG 19

RESULT 2164  
 ID ADR79066 standard; DNA; 19 BP.  
 ADR79066;  
 16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 3551.  
 antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; iRNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.

07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465665P.  
 25-APR-2003; 2003US-0465802P.  
 08-MAY-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.

```

PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3551; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 11 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2347 ATACCAAGATGATTAACA 2365
Db 1 ATACCAAGATGATTAACA 19
RESULT 2165
ADR79075
ID ADR79075 standard; DNA; 19 BP.
XX
XX ADR79075;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (Apob) oligonucleotide seqid 3560.
XX
XX antilipemic; cardiavt; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostratic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KM

```

```

KM colon cancer; lung cancer; neurological disease; Huntington disease;
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WC2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3560; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 8 A; 2 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```



QY 2411 GATTAAAGATTGAAATCC 2429  
 |||||  
 Db 1 GATTAAAGATTGAAATCC 19

RESULT 2166  
 ADR79094 ID ADR79094 standard; DNA; 19 BP.  
 XX ADR79094;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3579.  
 XX  
 KW antihypertic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3579; 378bp; English.  
 XX  
 SS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 3 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match  
 Best Local Similarity 100.0%; Score 19; DB 1; Length 19;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2631 GCCTTGAAGCTCCCACTG 2649  
 |||||  
 Db 1 GCCTTGAAGCTCCCACTG 19

RESULT 2167  
 ADR79110 ID ADR79110 standard; DNA; 19 BP.  
 XX ADR79110;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3595.  
 XX  
 KW antihypertic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-0494597P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX

PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI, 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3595; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match. 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2950 CATTACATTGCTCTAC 2968  
 |||||  
 Db 1 CATTACATTGCTCTAC 19  
 RESULT 2168  
 ADR79122  
 ID ADR79122 standard; DNA; 19 BP.  
 XX  
 AC ADR79122;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 3607.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.

XX  
 PN MO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-049386P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 PI WPI, 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3607; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match. 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3243 GCAGAGGTCGAGCAGA 3261  
 |||||  
 Db 1 GCAGAGGTCGAGCAGA 19

```

RESULT 2169
AD79165
ID ADR79165 standard; DNA, 19 BP.
XX
AC ADR79165;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3650.
XX
KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN MO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PE 08-MAR-2004; 2004MO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
PD WPI: 2004-677362/66.
XX
PF 08-MAR-2004; 2004MO-US007070.
XX
PT Interference RNA agent useful for treating dyslipidaemia, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 3650; 378bp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (II);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or

```

```

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemia, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
SQ Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 66+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 4084 CAGCCCTCCACTTCAAGTC 4102
Db 1 CAGCCCTCCACTTCAAGTC 19
XX
RESULT 2170
AD79169
ID ADR79169 standard; DNA, 19 BP.
XX
AC ADR79169;
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3654.
XX
KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
PN MO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004MO-US007070.
XX
PT 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX

```

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemiae, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3654; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance, the

CC dyslipidemiae, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control Apob gene expression.

XX

SO Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4166 TCAACTGCAAGTGCCTCTC 4184

Db 1 TCAACTGCAAGTGCCTCTC 19

RESULT 2171

ADR79171

XX ADR79171 standard; DNA, 19 BP.

XX

AC ADR79171;

XX

DT 16-DEC-2004 (first entry)

XX

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3656.

XX

XX anti-lipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;

KM cytosaratic; anticonvulsant; nootropic; muscular; anti-HIV;

KM RNA interference; iRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;

KM atherosclerosis; hepatic glucose production;

KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KM colon cancer; lung cancer; neurological disease; Huntington disease;

KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX

OS Homo sapiens.

XX

XX WO2004080406-A2.

XX

XX 23-SEP-2004.

XX

XX 08-MAR-2004; 2004MO-US007070.

XX

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465655P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX

XX (ALANY-) ALANYLAM PHARM.

PA

XX

PI Manoharan M, Bumcrot D;

PI

DR WPI; 2004-677362/66.

XX

XX

PT Interference RNA agent useful for treating dyslipidemiae, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX

PS Example 5; SEQ ID NO 3656; 378bp; English.

XX

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance, the

CC dyslipidemiae, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control Apob gene expression.

XX

SO Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4202 CTCACGATGCTACAGC 4220

Db 1 CTCACGATGCTACAGC 19

RESULT 2172

ADR79172

AD	ADR9172 standard; DNA; 19 BP.
XX	
AC	ADR9172;
XX	
DT	16-DEC-2004 (first entry)
XX	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 3657.
XX	
KW	antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KW	cytostatic; anticoagulant; nocotropic; muscular; anti-HIV;
KW	RNA interference; RNA; antisense technology; lipid metabolism;
KW	cholesterol imbalance; dyslipidemia hypercholesterolemia;
KW	coronary artery disease; CAD; coronary heart disease; CHD;
KW	atherosclerosis; hepatic glucose production;
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW	colon cancer; lung cancer; neurological disease; Huntington disease;
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO2004080406-A2.
XX	
PD	23-SEP-2004.
XX	
PF	08-MAR-2004; 2004WO-US007070.
XX	
PR	07-MAR-2003; 2003US-0452682P.
PR	12-MAR-2003; 2003US-0454265P.
PR	13-MAR-2003; 2003US-0454962P.
PR	13-MAR-2003; 2003US-0455050P.
PR	14-APR-2003; 2003US-0462894P.
PR	17-APR-2003; 2003US-0463772P.
PR	25-APR-2003; 2003US-0465665P.
PR	25-APR-2003; 2003US-0465802P.
PR	09-MAY-2003; 2003US-0465612P.
PR	08-AUG-2003; 2003US-0493986P.
PR	11-AUG-2003; 2003US-0494597P.
PR	26-SEP-2003; 2003US-0506341P.
PR	09-OCT-2003; 2003US-0510246P.
PR	10-OCT-2003; 2003US-0510318P.
PR	07-NOV-2003; 2003US-0518453P.
XX	
PA	(ALANY-) ALANYLAM PHARM.
XX	
PI	Manoharan M, Bumcrot D;
DR	WPI; 2004-677362/66.
XX	
PT	Interference RNA agent useful for treating dyslipidemias; coronary artery
PT	disease, diabetes, cancer or neurological disease, comprises sense
PT	sequence and antisense sequence which has specific modifications.
XX	
PS	Example 5; SEQ ID NO 3657; 378pp; English.
XX	
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a
CC	sense sequence and an antisense sequence, where the sense sequences have
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense
CC	sequences have one or more asymmetrical phosphorothioate modifications
CC	and the antisense sequence targets a human gene sequence. Also described
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);
CC	stabilising (I); involves selecting a sequence with activity and
CC	introducing one or more asymmetrical modification in the sequence, where
CC	the modification decreases nuclease sensitivity while not decreasing its
CC	activity; a kit comprising (I) and instruction for its use; and a device
CC	that can be dispense or administer a composition comprising (I). (I) is
CC	useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC	is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC	The subject is suffering from a disorder characterised by elevated or
CC	otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,
CC	dyslipidemias, hypercholesterolaemia, statin-resistant

CC	hypercholesterolemia, coronary artery disease (CAD), coronary heart
CC	disease (CHD) and atherosclerosis. (1) is administered to a subject to
CC	inhibit hepatic glucose production or for treating glucose-metabolism-
CC	related disorder e.g. diabetes or type-2 diabetes. (1) is useful for
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC	lung cancer), neurological disease (e.g., Huntington disease or
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC	can be used to control ApoB gene expression.
XX	
SQ	Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
QY	Query Match 0.1%; Score 19; DB 1; Length 19;
Db	Best Local Similarity 100.0%; Pred. No. 6e+02;
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0
	4205 CACGAATGCTTACAGCAAC 4223
	1 CACGAATGCTTACAGCAAC 19
RESULT 2173	
ID	ADR79188 standard; DNA; 19 BP.
XX	ADR79188;
XX	
DT	16-DEC-2004 (first entry)
XX	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 3673.
XX	
KM	antihypertic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;
KM	cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KM	RNA interference; iRNA; antisense technology; lipid metabolism;
KM	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KM	coronary artery disease; CAD; coronary heart disease; CHD;
KM	atherosclerosis; hepatic glucose production;
KM	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KM	colon cancer; lung cancer; neurological disease; Huntington disease;
KM	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX	
OS	Homo sapiens.
XX	
FN	WO2004080406-A2.
XX	
PD	23-SEP-2004.
XX	
PF	08-MAR-2004; 2004WO-US007070.
XX	
XX	07-MAR-2003; 2003US-0452662P.
PR	12-MAR-2003; 2003US-0454265P.
PR	13-MAR-2003; 2003US-0454962P.
PR	14-MAR-2003; 2003US-0455050P.
PR	14-APR-2003; 2003US-0462894P.
PR	15-APR-2003; 2003US-0463772P.
PR	25-APR-2003; 2003US-0465665P.
PR	25-APR-2003; 2003US-0465802P.
PR	09-MAY-2003; 2003US-0469612P.
PR	08-AUG-2003; 2003US-0493986P.
PR	11-AUG-2003; 2003US-0494597P.
PR	26-SEP-2003; 2003US-0506341P.
PR	09-OCT-2003; 2003US-0510246P.
PR	10-OCT-2003; 2003US-0510318P.
PR	07-NOV-2003; 2003US-0518453P.
XX	
PA	(ALNY-) ALNYLAM PHARM.
XX	
PI	Manoharan M, Bumcrot D;
XX	
DR	WPI; 2004-677362/66.
XX	
PT	Interference RNA agent useful for treating dyslipidaemias, coronary artery
XX	disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3673; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2',O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 8 A; 3 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4472 CTCGAAAGGTTTACTAATA 4490  
 DB 1 CTCGAAAGGTTTACTAATA 19  
 RESULT 2174  
 ADR79191  
 XX ADR79191 standard; DNA; 19 BP.  
 AC ADR79191;  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3676.  
 XX  
 KM antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; IRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3676; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2',O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 3 C; 4 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4553 GAAACGACATTTGTTGTC 4571  
 DB 1 GAAACGACATTTGTTGTC 19  
 RESULT 2175  
 ADR79198  
 ID ADR79198 standard; DNA; 19 BP.  
 XX  
 AC ADR79198;  
 XX

16-DEC-2004 (first entry)  
 Human apolipoprotein B (ApoB) oligonucleotide seqid 3683.  
 antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; RNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465656P.  
 29-APR-2003; 2003US-0465802P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemia, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3683; 378bp; English.

The invention describes a RNA interference (RNA) agent (I) comprising a  
 sense sequence and an antisense sequence, where the sense sequence  
 has one or more asymmetrical 2'-O alkyl modifications, the antisense  
 sequences have one or more asymmetrical phosphorothioate modifications  
 and the antisense sequence targets a human gene sequence. Also described  
 are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 levels or glucose-6-phosphatase levels in a subject; producing (I);  
 stabilising (I); involves selecting a sequence with activity and  
 introducing one or more asymmetrical modification in the sequence, where  
 the modification decreases nucleic acid sensitivity while not decreasing its  
 activity; a kit comprising (I) and instruction for its use; and a device  
 that can be dispensed or administered a composition comprising (I). (I) is  
 useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 The subject is suffering from a disorder characterised by elevated or  
 otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 disorder is chosen from the HDL/LDL cholesterol imbalance,  
 dyslipidemia, hypercholesterolaemia, statin-resistant  
 hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 inhibit hepatic glucose production or for treating glucose-metabolism-  
 related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 lung cancer), neurological disease (e.g., Huntington disease or  
 spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 can be used to control Apob gene expression.  
 Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 4677 GAGTCCAACTGAGCTTTA 4695  
 1 GAGTCCAACTGAGCTTTA 19  
 RESULT 2176  
 ADR79209  
 ID ADR79209 standard; DNA; 19 BP.  
 AC ADR79209;  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3694.  
 antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 RNA interference; RNA; antisense technology; lipid metabolism;  
 cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 coronary artery disease; CAD; coronary heart disease; CHD;  
 atherosclerosis; hepatic glucose production;  
 glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 colon cancer; lung cancer; neurological disease; Huntington disease;  
 spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 Homo sapiens.  
 WO2004080406-A2.  
 23-SEP-2004.  
 08-MAR-2004; 2004WO-US007070.  
 07-MAR-2003; 2003US-0452682P.  
 12-MAR-2003; 2003US-0454265P.  
 13-MAR-2003; 2003US-0454962P.  
 13-MAR-2003; 2003US-0455050P.  
 14-APR-2003; 2003US-0462894P.  
 17-APR-2003; 2003US-0463772P.  
 25-APR-2003; 2003US-0465656P.  
 09-MAY-2003; 2003US-0469612P.  
 08-AUG-2003; 2003US-0493986P.  
 11-AUG-2003; 2003US-0494597P.  
 26-SEP-2003; 2003US-0506341P.  
 09-OCT-2003; 2003US-0510246P.  
 10-OCT-2003; 2003US-0510318P.  
 07-NOV-2003; 2003US-0518453P.  
 (ALNY-) ALNYLAM PHARM.  
 Manoharan M, Bumcrot D;  
 WPI; 2004-677362/66.  
 Interference RNA agent useful for treating dyslipidemia, coronary artery  
 disease, diabetes, cancer or neurological disease, comprises sense  
 sequence and antisense sequence which has specific modifications.  
 Example 5; SEQ ID NO 3694; 378bp; English.

The invention describes a RNA interference (iRNA) agent (1) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (1); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (1); stabilising (1), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (1) and instruction for its use; and a device that can be dispense or administer a composition comprising (1). (1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (1) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (1) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 5 A; 5 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4973 TTCTGATCACTAAATTC 4991

Db 1 TTCTGATCACTAAATTC 19

RESULT 2177

ADR79501 standard; DNA; 19 BP.

XX ADR79501;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3993.

XX anti-lipemic; cardiact; vasotrophic; antiarteriosclerotic; anti-diabetic;  
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
XX RNA interference; iRNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS MO2004080406-A2.

PN 23-SEP-2004.

XX 08-MAR-2004; 2004MO-US007070.

PF 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0516453P.

XX (ALNT-) ALNTLAM PHARM.

PA Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3993; 378bp; English.

The invention describes a RNA interference (iRNA) agent (1) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (1); reducing (M1) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (1); stabilising (1), involves selecting a sequence with activity and introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (1) and instruction for its use; and a device that can be dispense or administer a composition comprising (1). (1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (1) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (1) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a human apolipoprotein B (ApoB) antisense oligonucleotide that can be used to control ApoB gene expression.

Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4240 CCTCCTACAGTGTGCA 4258

Db 1 CCTCCTACAGTGTGCA 19

RESULT 2178

ADR79852 standard; DNA; 19 BP.

XX ADR79852;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4346.



KM anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0453682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0506341P.  
 XX 26-SEP-2003; 2003US-0510246P.  
 XX 09-OCT-2003; 2003US-0510318P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4346; 378bp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilizing (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (apob) antisense oligonucleotide that

CC can be used to control Apob gene expression.  
 XX Sequence 19 BP, 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;  
 SO Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 66+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2948 CACATTACATTGGTCTCT 2966  
 DB 1 CACATTACATTGGTCTCT 19  
 RESULT 2179  
 ADR79926  
 ID ADR79926 standard; DNA, 19 BP.  
 XX ADR79926;  
 AC 16-DEC-2004 (first entry)  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (apob) oligonucleotide seqid 4422.  
 DE anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 13-MAR-2003; 2003US-0455050P.  
 XX 14-APR-2003; 2003US-0462894P.  
 XX 17-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 25-APR-2003; 2003US-0465802P.  
 XX 09-MAY-2003; 2003US-0493986P.  
 XX 08-AUG-2003; 2003US-0493986P.  
 XX 11-AUG-2003; 2003US-0494597P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4422; 378bp; English.  
 PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 3343 ACCTCGGACATCTCTGAG 3361

Db 1 ACCTCGGACATCTCTGAG 19

RESULT 2180

ID ADR80291 standard; DNA; 19 BP.

AC ADR80291;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4788.

KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

PD 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462834P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALANYLAM PHARM.

PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

XX WPI; 2004-677362/66.

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4814; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M) apob-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nuclease sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)

XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.

XX The subject is suffering from a disorder characterised by elevated or

XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted

XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

XX disorder is chosen from the HDL/LDL cholesterol imbalance, the

XX dyslipidemia, hypercholesterolaemia, statin-resistant

XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

XX disease (CHD) and atherosclerosis. (I) is administered to a subject to

XX inhibit hepatic glucose production or for treating glucose-metabolism-

XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

XX lung cancer), neurological disease (e.g., Huntington disease or

XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that

XX can be used to control Apob gene expression.

XX Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 4886 GATGATATGACCTTCTCT 4904

Db 1 GATGATATGACCTTCTCT 19

RESULT 2182

ADR80323 standard; DNA; 19 BP.

XX ADR80323;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (Apob) oligonucleotide seqid 4820.

XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytosstatic; anticonvulsant; nootropic; muscula; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 09-MAY-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

XX disease, diabetes, cancer or neurological disease, comprises sense

XX sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 4820; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequences have

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M) apob-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilising (I), involves selecting a sequence with activity and



KM spino cerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 OS  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYTAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4858; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (ML) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (ML)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 6 A; 2 C; 4 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Prd. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 4552 AGAAGACGATTGTTGT 4570  
 DB |||||||  
 1 AGAAGACGATTGTTGT 19  
 RESULT 2185  
 ADR80624  
 ID ADR80624 standard; DNA; 19 BP.  
 XX  
 AC ADR80624;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 5121.  
 XX  
 KW antihypertic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spino cerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 KM  
 KM  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYTAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 5121; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (ML) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SQ Sequence 19 BP; 3 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3698 TTCCCAATTTCCCTGTGGAT 3716  
 1 TTCCCAATTTCCCTGTGGAT 19

RESULT 2186  
 ADR80696  
 ID ADR80696 standard; DNA; 19 BP.  
 XX ADR80696;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5193.

KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; tRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.  
 XX PN WO2004080406-A2.  
 XX PD 23-SEP-2004.  
 XX PF 08-MAR-2004; 2004WO-US007070.  
 XX PR 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX PA (ALNY-) ALNYLAM PHARM.

XX PI Manoharan M, Bumcrot D;  
 XX DR WPI; 2004-677362/66.  
 XX PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX PS Example 5; SEQ ID NO 5193; 378bp; English.

XX The invention describes a RNA interference (tRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I), involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity; a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterized by elevated or  
 XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control Apob gene expression.

SQ Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2908 CTTCCCAAGAGACCAGT 2926  
 1 CTTCCCAAGAGACCAGT 19

RESULT 2187  
 ADR79908  
 ID ADR79908 standard; DNA; 19 BP.  
 XX ADR79908;  
 XX DT 16-DEC-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4404.

KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; tRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.  
 XX

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PN WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465812P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4404; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity, a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidemia, hypercholesterolemia, statin-resistant
XX hypercholesterolemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 4983 CTAATTCCTCCATGGCTTGG 5001
XX |||||||||||||||
XX 1 CTAATTCCTCCATGGCTTGG 19
XX

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RESULT 2188
ADR76964 standard; DNA; 19 BP.
XX
XX ID ADR76964;
XX
XX ADR76964;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (Apob) oligonucleotide seqid 1449.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cyostatic; anticoustant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidemia hypercholesterolemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0465812P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1449; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity, a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX

```

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 Matches 19; Conservative 0; Indels 0

Dy 4983 CTAATTCCTCATGCTCTTG 5001  
 1 CTAATTCCTCATGCTCTTG 19

RESULT 2189  
 ADR76519  
 ID ADR76519 standard; DNA; 19 BP.  
 AC ADR76519;  
 XX  
 XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1004.  
 XX  
 XX anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYTAM PHARM.  
 PA  
 XX Manoharan M, Bumciot D;  
 PI  
 XX WPI; 2004-677362/66.  
 XX DR

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1004; 378pp; English.

PS The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;  
 Matches 19; Conservative 0; Indels 0

Dy 5813 CTTCCGTTCTGTATGACC 5831  
 1 CTTCCGTTCTGTATGACC 19

RESULT 2190  
 ADR79463  
 ID ADR79463 standard; DNA; 19 BP.  
 AC ADR79463;  
 XX  
 XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3948.  
 XX  
 XX anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosratic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.  
 OS  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX



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PF 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3948; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphate levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphate levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphate levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 5813 CTTCCGTTCTGTATGACC 5831
XX |||||
XX Db 1 CTTCCGTTCTGTATGACC 19
XX |||||

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XX
XX ADR78688;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3173.
XX
XX anti-lipemic; cardiant; vasotropic; antiatherosclerotic; antidiabetic;
XX cytosstatic; anticoagulant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3173; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphate levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphate levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphate levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart

```

Query Match	0.1%: Score 19; DB 1; Length 19;	Best Local Similarity 100.0%; Pred. No. 6e+02;	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4386 AATTCCTCATGCTCTGACT 5004			
Db 1 AATTCCTCATGCTCTGACT 19			
RESULT 2192			
ADRF6070			
ID ADR76070 standard; DNA; 19 BP.			
XX ADR76070;			
XX 16-DEC-2004 (first entry)			
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 555.			
XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;			
KM cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;			
KM RNA interference; tRNA; antisense technology; lipid metabolism;			
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;			
KM coronary artery disease; CAD; coronary heart disease; CHD;			
KM atherosclerosis; hepatic glucose production;			
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;			
KM colon cancer; lung cancer; neurological disease; Huntington disease;			
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.			
OS Homo sapiens.			
XX MO2004080406-A2.			
PN 23-SEP-2004.			
PD 08-MAR-2004; 2004WO-US007070.			
PF 07-MAR-2003; 2003US-0452682P.			
XX 12-MAR-2003; 2003US-0454265P.			
PR 13-MAR-2003; 2003US-0454962P.			
XX 14-MAR-2003; 2003US-0455050P.			
PR 14-APR-2003; 2003US-0462894P.			
XX 17-APR-2003; 2003US-0463772P.			
PR 25-APR-2003; 2003US-0465865P.			
XX 25-APR-2003; 2003US-0465802P.			
PR 09-MAY-2003; 2003US-0469612P.			
XX 08-AUG-2003; 2003US-0493986P.			
PR 11-AUG-2003; 2003US-0494597P.			
XX 26-SEP-2003; 2003US-0506341P.			
PR 09-OCT-2003; 2003US-0510246P.			
XX 10-OCT-2003; 2003US-0510318P.			
PR 07-NOV-2003; 2003US-0518453P.			
XX (ALNY-) ALNYLAM PHARM.			
PA Manoharan M, Bumcrot D;			
XX WPI, 2004-677362/66.			
XX Interference RNA agent useful for treating dyslipidemias, coronary artery			
PT disease, diabetes, cancer or neurological disease, comprises sense			
PT sequence and antisense sequence which has specific modifications.			

XX	Example 5; SEQ ID NO 555; 378bp; English.
PS	
CC	The invention describes a RNA interference (RNA) agent (I) comprising a
CC	sense sequence and an antisense sequence, where the sense sequences have
CC	one or more asymmetrical 2'-O alkyl modifications, the antisense
CC	sequences have one or more asymmetrical phosphorothioate modifications
CC	and the antisense sequence targets a human gene sequence. Also described
CC	are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);
CC	stabilising (I), involves selecting a sequence with activity and
CC	introducing one or more asymmetrical modification in the sequence, where
CC	the modification decreases nuclease sensitivity while not decreasing its
CC	activity; a kit comprising (I) and instruction for its use; and a device
CC	that can be dispensed or administered a composition comprising (I). (I) is
CC	useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC	is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC	The subject is suffering from a disorder characterised by elevated or
CC	otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC	disorder is chosen from the HDL/HDL cholesterol imbalance,
CC	dyslipidaemias, hypercholesterolaemia, statin-resistant
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC	inhibit hepatic glucose production or for treating glucose-metabolism-
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC	treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC	lung cancer), neurological disease (e.g., Huntington disease or
CC	spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC	represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC	can be used to control ApoB gene expression.
CC	
XX	
SQ	Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
	Query Match            0.1%; Score 19; DB 1; Length 19;
	Best local Similarity   100.0%; Pred. NO. 6e+02;
	Matches     19; Conservative   0; Mismatches     0; Indels         0; Gaps         0.
Oy	4986 AATTCACATGGTCTTGAGT 5004       1 AATTCACATGGTCTTGAGT 19
Db	
RESULT 2193	
ID	ADR80416
AC	ADR80416 standard; DNA; 19 BP.
XX	
AC	ADR80416;
XX	
DT	16-DEC-2004 (first entry)
XX	
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 4913.
XX	
KW	antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic; cytostatic; anticongulant; nootropic; muscular; anti-HIV; RNA interference; RNA; antisense technology; lipid metabolism; cholesterol imbalance; dyslipidaemia hypercholesterolaemia; coronary artery disease; CAD; coronary heart disease; CHD; atherosclerosis; hepatic glucose production; glucose-metabolism-related disorder; diabetes; cancer; breast cancer; colon cancer; lung cancer; neurological diseases; Huntington disease; spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX	
OS	Homo sapiens.
PN	WO2004080406-A2.
XX	
PD	23-SEP-2004.
XX	
Pf	08-MAR-2004; 2004WO-US007070.
XX	
PR	07-MAR-2003; 2003US-0452682P.
PR	12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465912P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4913; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 7949 TCAGAAAGCTACCTTCCAG 7967
XX |||||
XX 1 TCAGAAAGCTACCTTCCAG 19
XX
XX RESULT 2194
XX ADR80776
XX ADR80776 standard; DNA; 19 BP.
XX
XX ADR80776;
XX
XX 16-DEC-2004 (first entry)

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XX
XX Human apolipoprotein B (Apob) oligonucleotide seqid 5275.
XX
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004MO-US007070.
XX
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 5275; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5812 TCCTCCGTTCTGATGCG 5830

Db 1 TCCTCCGTTCTGATGCG 19

# RESULT 2195

ADR76701 ADR76701 standard; DNA; 19 BP.

AC ADR76701;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1186.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;

KM cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KM RNA interference; iRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;

KM atherosclerosis; hepatic glucose production;

KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KM colon cancer; lung cancer; neurological disease; Huntington disease;

KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004MO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 23-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1186; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have

CC one or more asymmetrical 2'-O alkyl modifications, the antisense

CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100

CC levels or glucose-6-phosphatase levels in a subject; producing (I);

CC stabilising (I), involves selecting a sequence with activity and

CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its

CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is

CC useful for reducing apob-100 levels or glucose-6-phosphatase levels.

CC The subject is suffering from a disorder characterised by elevated or

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,

CC dyslipidaemias, hypercholesterolaemia, statin-resistant

CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to

CC inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or

CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that

CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Qy 11879 CAGCTCAACCGTACAGTTC 11897

Db 1 CAGCTCAACCGTACAGTTC 19

# RESULT 2196

ADR77472 ADR77472 standard; DNA; 19 BP.

AC ADR77472;

XX 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1957.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;

KM cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KM RNA interference; iRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;

KM atherosclerosis; hepatic glucose production;

KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KM colon cancer; lung cancer; neurological disease; Huntington disease;

KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004MO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0462894P.

XX 25-APR-2003; 2003US-0463772P.

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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1957; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 7949 TCAGAAAGCTACCTTCCAG 7967
XX |||||
XX 1 TCAGAAAGCTACCTTCCAG 19
XX
XX RESULT 2197
XX ADR79838 standard; DNA; 19 BP.
XX
XX ADR79838;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4332.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX

```

```

KW cytosolic; anticomvulant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; 88.
XX
XX Homo sapiens.
XX
XX MO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004MO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLTM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4332; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX

```

XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;  
 SQ Best Local Similarity 100.0%; Score 19; DB 1; Length 19;  
 Query Match 0.1%; Pred. No. 66+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 5812 TCTTCGCTCTGTAATGC 5830  
 Db 1 TCTTCGCTCTGTAATGC 19  
 RESULT 2198  
 ID ADR79645  
 ADR79645 standard; DNA; 19 BP.  
 XX ADR79645;  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4139.  
 XX anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; RNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004MO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALANY-) ALANYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR 16-DEC-2004 (first entry)  
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 4139; 378bp; English.  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 SQ Best Local Similarity 100.0%; Score 19; DB 1; Length 19;  
 Query Match 0.1%; Pred. No. 66+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 11879 CAGCTCACCGTACAGTTC 11897  
 Db 1 CAGCTCACCGTACAGTTC 19  
 RESULT 2199  
 ID ADR80200  
 ADR80200 standard; DNA; 19 BP.  
 XX ADR80200;  
 XX 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4697.  
 XX anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; RNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX Homo sapiens.  
 OS WO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004MO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4697; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX  
 SQ Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 8987 CCTCACTTCCTTGGACTG 9005  
 Db 1 CCTCACTTCCTTGGACTG 19  
 RESULT 2200  
 ADDR80055  
 ID ADDR80055 standard; DNA; 19 BP.  
 XX  
 AC ADDR80055;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4551.  
 XX  
 XX antiischemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454285P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4551; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7949 TCAGAAAGCTACTCTCCAG 7967  
Db 1 TCAGAAAGCTACTCTCCAG 19

## RESULT 2201

ADRT7256  
ID ADR77256 standard; DNA, 19 BP.

AC ADR77256;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1741.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KM cytosarctic; anticonvulsant; nootropic; muscular; anti-HIV;

KM RNA interference; lRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;

KM atherosclerosis; hepatic glucose production;

KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KM colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0465812P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SO Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 8987 CCTCCTCTCTTGACTG 9005  
Db 1 CCTCCTCTCTTGACTG 19

## RESULT 2202

ADR76894  
ID ADR76894 standard; DNA, 19 BP.

AC ADR76894;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1379.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KM cytosarctic; anticonvulsant; nootropic; muscular; anti-HIV;

KM RNA interference; lRNA; antisense technology; lipid metabolism;

KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;

KM atherosclerosis; hepatic glucose production;

KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KM colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0465812P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.



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PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1379; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5812 TCTTCGTTCTGTATGCG 5830
Db 1 TCTTCGTTCTGTATGCG 19

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XX Homo sapiens.
OS
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-APR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2603; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5812 TCTTCGTTCTGTATGCG 5830

```

Db 1 TCTTCGTTCTGTAATGC 19

## RESULT 2204

ID ADR77111 standard; DNA; 19 BP.

AC ADR77111;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1596.

XX antihypertensive; cardiometabolic; vasotrophic; antiarteriosclerotic; antidiabetic;  
 KW cytoskeletal; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production; diabetes; cancer; breast cancer;  
 KW glucose-metabolism-related disorder; Huntington disease; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; AIDS; apolipoprotein B; apoB; ss.  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

PA Manoharan M, Bumcrot D;

PI WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 1596; 378bp; English.

XX The invention describes a RNA interference (RNAi) agent (I) comprising a

XX sense sequence and an antisense sequence, where the sense sequence has

XX one or more asymmetrical 2'-O alkyl modifications, the antisense

XX sequences have one or more asymmetrical phosphorothioate modifications

XX and the antisense sequence targets a human gene sequence. Also described

XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100

XX levels or glucose-6-phosphatase levels in a subject; producing (I);

XX stabilizing (I); involves selecting a sequence with activity and

XX introducing one or more asymmetrical modification in the sequence, where

XX the modification decreases nucleic acid sensitivity while not decreasing its

XX activity; a kit comprising (I) and instruction for its use; and a device

XX that can be dispense or administer a composition comprising (I). (I) is

XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)

CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 6e+02; Mismatches 0; Gaps 0;

XX Matches 19; Conservative 0; Indels 0;

QY 7949 TCAGAAAGCTACCTTCAG 7967

DB 1 TCAGAAAGCTACCTTCAG 19

## RESULT 2205

ID ADR77489 standard; DNA; 19 BP.

AC ADR77489;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1974.

XX antihypertensive; cardiometabolic; vasotrophic; antiarteriosclerotic; antidiabetic;  
 KW cytoskeletal; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production; diabetes; cancer; breast cancer;  
 KW glucose-metabolism-related disorder; Huntington disease; Huntington disease;  
 KW colon cancer; lung cancer; neurological disease; AIDS; apolipoprotein B; apoB; ss.  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

XX Homo sapiens.

OS WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

PR 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465665P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0493986P.

PR 08-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

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PI Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Inference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 1974; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 7649 CATGAAGGCCCAATTCCGA 7667
XX 1 CATGAAGGCCCAATTCCGA 19
XX
XX RESULT 2206
XX ADR77687
XX ID ADR77687 standard; DNA, 19 BP.
XX
XX ADR77687;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2172.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX PN WO2004080406-A2.

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XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004MO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465655P.
XX 25-APR-2003; 2003US-0465802P.
XX 08-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493866P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYTAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
XX
XX Inference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2172; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I); involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, coronary artery disease, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 7651 TGAAGGCCCAATTCCGAGA 7669
XX 1 TGAAGGCCCAATTCCGAGA 19
XX

```

RESULT 2207  
 ADR79322  
 ID ADR79322 standard; DNA; 19 BP.  
 XX  
 AC ADR79322;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3807.  
 XX  
 KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYTAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI: 2004-677362/66.  
 XX  
 PF Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3807; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involve selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The

CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 CC  
 XX  
 SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 19; DB 1; Length 19;  
 DB Best Local Similarity 100.0%; Pred. No. 6e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 7651 TGAAGGCCAATTCCGAGA 7669  
 DB 1 TGAAGGCCAATTCCGAGA 19  
 DB  
 RESULT 2208  
 ADR80433  
 ID ADR80433 standard; DNA; 19 BP.  
 XX  
 AC ADR80433;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4930.  
 XX  
 KW antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYTAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI: 2004-677362/66.  
 XX

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4930; 378bp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilizing (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I), and a device  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC The subject is suffering from a disorder characterized by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemia, hypercholesterolemia, statin-resistant  
 CC hypercholesterolemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

XX Sequence 19 BP; 7 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 6e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7649 CATGAGGCCAATTCCGA 7667

Db 1 CATGAGGCCAATTCCGA 19

RESULT 2209

AAD37201/C

XX AAD37201 standard; DNA; 20 BP.

XX AAD37201;

XX 21-AUG-2002 (first entry)

DE Human MEKK4 antisense oligonucleotide, ISIS #123136.

KW Human; MEKK4 modulation; mitogen-activated protein kinase kinase 4; MTK1;  
 KW MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKK4; cytosolic;  
 KW prophyllaxis; immunological; hyperproliferative disorder; cancer; therapy;  
 KW antisense; inflammatory; phosphorothioate backbone; ss.

XX Homo sapiens.

OS Synthetic.

XX Key

FT modified\_base

FT modified\_base

FT modified\_base

FT modified\_base

FT modified\_base

FT modified\_base

PT modified\_base 2

PT /\*tag= d

PT /mod\_base= m5c

PT modified\_base 5

PT /\*tag= e

PT /mod\_base= m5c

PT modified\_base 8

PT /\*tag= f

PT /mod\_base= m5c

PT modified\_base 11

PT /\*tag= g

PT /mod\_base= m5c

PT modified\_base 14

PT /\*tag= h

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= i

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= j

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= k

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= l

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= m

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= n

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= o

PT /mod\_base= m5c

PT modified\_base 17

PT modified\_base 2

PT /\*tag= d

PT /mod\_base= m5c

PT modified\_base 5

PT /\*tag= e

PT /mod\_base= m5c

PT modified\_base 8

PT /\*tag= f

PT /mod\_base= m5c

PT modified\_base 11

PT /\*tag= g

PT /mod\_base= m5c

PT modified\_base 14

PT /\*tag= h

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= i

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= j

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= k

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= l

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= m

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= n

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= o

PT /mod\_base= m5c

PT modified\_base 17

PT modified\_base 2

PT /\*tag= d

PT /mod\_base= m5c

PT modified\_base 5

PT /\*tag= e

PT /mod\_base= m5c

PT modified\_base 8

PT /\*tag= f

PT /mod\_base= m5c

PT modified\_base 11

PT /\*tag= g

PT /mod\_base= m5c

PT modified\_base 14

PT /\*tag= h

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= i

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= j

PT /mod\_base= m5c

PT modified\_base 20

PT /\*tag= k

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= l

PT /mod\_base= m5c

PT modified\_base 16

PT /\*tag= m

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= n

PT /mod\_base= m5c

PT modified\_base 17

PT /\*tag= o

PT /mod\_base= m5c

PT modified\_base 17

```

XX ADH18337;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapper antisense oligo targeted to human Apob DNA 2 - SEQ ID 326.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapper; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003MO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 326; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (Apob) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapper antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3232 TTGTAAGTCAAGCAAGG 3250
XX |
XX 20 TTGTAAGTCAAGCAAGG 2
XX
XX RESULT 2211
XX ID ADH18699 standard; DNA; 20 BP.
XX
XX AC ADH18699;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 688.
XX
XX KW apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX

```

```

KW antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003MO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 688; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (Apob) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human Apob antisense
XX inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3232 TTGTAAGTCAAGCAAGG 3250
XX |
XX 1 TTGTAAGTCAAGCAAGG 19
XX
XX Db
XX
XX RESULT 2212
XX ID ADO32878/c
XX
XX AC ADO32878;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Antisense 2'-MOE gapper oligo targeted to human Apob-100 RNA - SEQ 326.
XX
XX KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual atelliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss;
XX apolipoprotein B-100; Apob-100.
XX
XX KW Homo sapiens.
XX
XX OS
XX FH Key Location/Qualifiers

```



```

XX AAF99580;
XX
XX 12-JUN-2001 (first entry)
XX
XX
XX Immunostimulatory nucleic acid #696.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX immunostimulatory; tumour; viral infection; bacterial infection;
XX fungal infection; parasitic infection; cancer; asthma;
XX infectious disease; allergy; immune deficiency; phosphorochioate; ss.
XX
XX Synthetic.
XX
XX WO200122972-A2.
XX
XX
XX 05-APR-2001.
XX
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX
XX 25-SEP-1999; 99US-015613P.
XX
XX 27-SEP-1999; 99US-015613P.
XX
XX 23-AUG-2000; 2000US-0227436P.
XX
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX
XX WPI; 2001-273485/28.
XX
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 53; 338pp; English.
XX
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorochioate backbone
XX
XX
XX Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 19; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 176 GCTGCTGCTGCTGCTGCTG 194
XX |||||||
XX 3 GCTGCTGCTGCTGCTGCTG 21
XX
XX
XX RESULT 2215
XX ABL38849 standard; DNA; 21 BP.
XX
XX ABL38849;
XX
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #780.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX

```

```

XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubosis; Osler-Webber Syndrome; myocardial angiodysplasia;
XX plaque neovascularisation; telangiectasia; haemophilic joint;
XX angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX
XX 11-JUL-2002.
XX
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX
XX 14-DEC-2000; 2000US-025534P.
XX
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 33; 276pp; English.
XX
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubosis, Osler-Webber Syndrome, myocardial angiodysplasia, plaque
XX neovascularisation, telangiectasia, haemophilic joint, angiodiroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX
XX Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 19; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 176 GCTGCTGCTGCTGCTGCTG 194
XX |||||||
XX 3 GCTGCTGCTGCTGCTGCTG 21
XX
XX
XX RESULT 2216
XX ABL38849 standard; DNA; 21 BP.
XX
XX ABL38849;
XX
XX
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 240.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorochioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..21
XX FT /*tag= a
XX

```





PF 29-MAR-2002; 2002US-00112653.  
XX  
XX 29-MAR-2001; 2001US-0279642P.  
XX  
PA (KRIE/) KRIEG A M.  
PA (BERG/) BERG D J.  
XX  
XX Krieg AM, Berg DJ;  
XX  
DR WPI; 2003-521815/49.  
XX  
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
PT disease by administering an immunostimulatory nucleic acid.  
XX  
XX  
PS Disclosure; Page 29; 229pp; English.  
XX  
XX The invention describes a method of treating non-allergic inflammatory  
CC disease comprising administering to a subject having or at risk of  
CC developing a non-allergic inflammatory disease an immunostimulatory  
CC nucleic acid for prevention or treatment of the disease. The method is  
CC useful for treating non-allergic inflammatory diseases, such as  
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
CC This sequence represents an immunostimulatory nucleic acid  
XX  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCTG 194  
Db 3 GCTGCTGCTGCTGCTGCTG 21

RESULT 2219  
ADB37082  
ID ADB37082 standard; DNA; 21 BP.  
XX  
XX ADB37082;  
XX  
DT 04-DEC-2003 (first entry)  
XX  
DE Immunostimulatory nucleic acid #696.  
XX  
KM de; allergy; asthma; poly-G nucleic acid; aerosol formulation;  
KM hypo-responsive subject; immunostimulatory.  
XX  
OS Synthetic.  
XX  
PN US2003087848-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 02-FEB-2001; 2001US-00776479.  
XX  
XX 03-FEB-2000; 2000US-0179991P.  
XX  
PA (BRAT/) BRATZLER R L.  
PA (PETE/) PETERSEN D M.  
PA (FOUR/) FOURON Y.  
XX  
XX Bratzler RL, Petersen DM, Fouron Y;  
XX  
DR WPI; 2003-657977/62.  
XX  
XX Treating and/or preventing allergy or asthma using an immunostimulatory  
PT nucleic acid alone or in combination with an asthma/allergy medicament.  
XX  
XX Disclosure; Page 16; 221pp; English.

CC The invention relates to a method of treating or preventing allergy or  
CC asthma which comprises administering to a subject a poly-G nucleic acid  
CC in an aerosol formulation. The methods and compositions of the present  
CC invention are useful for diagnosing and/or treating asthma and allergy  
CC especially in a hypo-responsive subject. The present sequence represents  
CC an immunostimulatory nucleic acid of the invention.  
XX  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCTG 194  
Db 3 GCTGCTGCTGCTGCTGCTG 21

RESULT 2220  
ADN97255/C  
ID ADN97255 standard; DNA; 24 BP.  
XX  
XX ADN97255;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX  
DE Primer of the invention #57.

XX DNA fingerprinting; Cannabis sativa; short tandem repeat marker;  
KM forensic identification; marijuana; primer; ss.  
XX  
XX  
OS Unidentified.

XX  
XX  
PN W02004008841-A2.  
XX  
PD 29-JAN-2004.  
XX  
XX  
PF 21-JUL-2003; 2003WO-US022887.  
XX  
XX 19-JUL-2002; 2002US-0397179P.  
XX  
XX  
XX (UYAR-) UNIV ARIZONA.  
XX  
XX (KEIM/) KEIM P S.  
XX  
XX (ZINN/) ZINNAMON K.  
XX  
XX  
XX Keim PS, Zinnamon K;  
XX  
XX  
DR WPI; 2004-143139/14.  
XX  
XX

PT New isolated nucleic acid for amplification of a short tandem repeat  
PT located in DNA isolated from Cannabis sativa L species, useful for  
PT forensic identification of marijuana or for linking a marijuana sample to  
PT its plant source.  
XX  
XX  
PS Example 11; SEQ ID NO 122; 79pp; English.

XX  
XX The present invention relates to DNA fingerprinting for Cannabis Sativa  
CC using short tandem repeat markers. The nucleic acid is useful for  
CC forensic identification of marijuana or for linking a marijuana sample to  
CC its plant source. The present sequence represents a primer of the  
CC invention.  
XX  
XX  
SQ Sequence 24 BP; 8 A; 8 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 19; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 8.4e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCTG 194  
Db 24 GCTGCTGCTGCTGCTGCTG 6

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RESULT 2221
ADN97164/C
XX ADN97164 standard; DNA; 24 BP.
XX
AC ADN97164;
XX
DT 01-JUL-2004 (first entry)
XX
DE Primer of the invention #3.
XX
KM DNA fingerprinting; Cannabis sativa; short tandem repeat marker;
KW forensic identification; marijuana; primer; ss.
XX
OS Synthetic.
XX
PN WO200400841-A2.
XX
PD 29-JAN-2004.
XX
PF 21-JUL-2003; 2003WO-US022887.
XX
PR 19-JUL-2002; 2002US-0397179P.
XX
PA (UNIV-) UNIV ARIZONA.
PA (KEIM/) KEIM P S.
PA (ZINN/) ZINNAMON K.
XX
PI Keim PS, Zinnamon K;
XX
DR WPI, 2004-143139/14.
XX
PT New isolated nucleic acid for amplification of a short tandem repeat
PT located in DNA isolated from Cannabis sativa L species, useful for
PT forensic identification of marijuana or for linking a marijuana sample to
PT its plant source.
XX
PS Disclosure: SEQ ID NO 31; 79pp; English.
XX
CC The present invention relates to DNA fingerprinting for Cannabis Sativa
CC using short tandem repeat markers. The nucleic acid is useful for
CC forensic identification of marijuana or for linking a marijuana sample to
CC its plant source. The present sequence represents a primer of the
CC invention.
XX
SQ Sequence 24 BP; 8 A; 8 C; 8 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 8,4e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 24 GCTGCTGCTGCTGCTGCTG 6

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RESULT 2222
ADN86835
XX ADN86835 standard; DNA; 24 BP.
XX
AC ADN86835;
XX
DT 04-NOV-2004 (first entry)
XX
DE DNA G-quadruplex structure-fixing compound-related oligonucleotide #12.
XX
KM G-quadruplex structure; isomer; racemate; enantiomer; diastereoisomer;
KW cytoskeletal; muscular-Gen; dermatological; vasotrophic; endocrine-Gen;
KW telomerase inhibitor; anticancer agent; genetic disorder;
KW Bloom's syndrome; Werner's syndrome; Rothmund-Thomson syndrome;
KW ataxia telangiectasia; ss.
XX
OS Unidentified.
XX

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PN FR2850970-A1.
XX
PD 13-AUG-2004.
XX
PF 07-FEB-2003; 2003FR-00001478.
XX
PR 07-FEB-2003; 2003FR-00001478.
XX
PA (AVET ) AVENTIS PHARMA SA.
PA (CNRS ) CNRS CENT NAT RECH SCI.
PA (MUSE-) MUSEUM NAT HISTOIRE NATURELLE.
PA (CURI-) INST CURIE.
PA (COMS ) COMMISSARIAT ENERGIE ATOMIQUE.
PA (UYRE-) UNIV REIMS CHAMPAGNE-ARDENNE.
XX
PI Hittinger A, Caulfield T, Maillet P, Bouchard H, Mandine E;
PI Belmokhtar C, Mergny JL, Guittat L, Riou JF, Gomez D;
XX
DR WPI, 2004-583573/57.
XX
PT New quaternary aromatic nitrogen heterocycle derivatives that fix the G-
PT quadruplex structure of DNA or RNA are telomerase inhibitors, useful in
PT the treatment of cancers and some genetic disorders.
XX
PS Disclosure; Page 25; 57pp; French.
XX
CC This invention relates to novel compounds that fix the G-quadruplex
CC structure of DNA or RNA, their isomers, racemates, enantiomers,
CC diastereoisomers, and their salts. The invention may be useful for the
CC production of compounds with a cytostatic, muscular-Gen, dermatological,
CC vasotrophic or endocrine-Gen activity acting as telomerase inhibitors. The
CC compounds are useful as anticancer agents and for treatment of genetic
CC disorders such as Bloom's syndrome, Werner's syndrome, Rothmund-Thomson
CC syndrome and ataxia telangiectasia. The present sequence is that of an
CC oligonucleotide which is related to the novel compounds of the invention.
XX
SQ Sequence 24 BP; 0 A; 8 C; 8 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 19; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 8,4e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 3 GCTGCTGCTGCTGCTGCTG 21

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RESULT 2223
ABZ81767/C
XX ABZ81767 standard; DNA; 25 BP.
XX
AC ABZ81767;
XX
DT 11-JUN-2003 (first entry)
XX
DE Huntington's disease gene target region.
XX
KM Huntington's disease; neurotrophic; anticonvulsant; huntingtin; human;
KW gene therapy; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_binding 1..25
FT /*tag= a
FT /bound_moiety= "Oligonucleotide"
FT /note="hybridises to bases 1-25 of sequence given in
FT ABZ81768"
FT misc_difference 13
FT /*tag= b
FT /note= "replaced by T following treatment"
XX
PN WO2003013437-A2.

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XX 20-FEB-2003.
PD 07-AUG-2002; 2002WO-US025352.
XX 07-AUG-2001; 2001US-0310757P.
XX 08-AUG-2001; 2001US-0310770P.
PR 08-AUG-2001; 2001US-0310889P.
PR 04-DEC-2001; 2001US-0337219P.
XX (UYDE ) UNIV DELAWARE.
PA Kmiec EB, Parekh-Olmado H;
XX WPI; 2003-256478/25.
XX
XX New single stranded oligonucleotides comprising a DNA domain having at
PT least one mismatch with respect to the genetic sequence of the
PT Huntington's disease gene to be altered, useful for treating or
PT preventing Huntington's disease.
XX
XX Example 1; Fig 6a; 133pp; English.
XX
XX The present sequence is that of a portion of the glutamine (CAG) triplet
CC repeat region of exon 1 of the human Huntington's disease (HD) gene (see
CC also ABZ81760). This region of exon 1 is targeted by a DNA-RNA hybrid
CC oligonucleotide of the invention (see ABZ81768), resulting in a CAG to
CC TAG (stop codon) nucleotide exchange due to sliding of the repeat region,
CC a phenomenon that can occur with the methods of this invention. The
CC oligonucleotide is an example of oligonucleotides of the invention for
CC targeted alteration of the HD gene. Such oligonucleotides can be used for
CC the treatment or prevention of HD
XX
SQ Sequence 25 BP; 8 A; 9 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 8,9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 25 GCTGCTGCTGCTGCTGCTG 7
RESULT 2224
ABZ81768
ID ABZ81768 standard; RNA; 25 BP.
XX
AC ABZ81768;
XX
XX 11-JUN-2003 (first entry)
XX
XX Huntington's disease gene targeting oligonucleotide.
DE
XX Huntington's disease; neurotropic; anticonvulsant; huntingtin; human;
KM gene therapy; de.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH misc_binding 1..25
FT /*tag= a
FT /bound_molecys= "HD gene exon 1 triplet repeat"
FT /note= "hybridises to bases 1-25 of sequence given in
FT ABZ81767"
XX
XX WO2003013437-A2.
XX
XX 20-FEB-2003.
XX
XX 07-AUG-2002; 2002WO-US025352.
XX
XX 07-AUG-2001; 2001US-0310757P.
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PR 08-AUG-2001; 2001US-0310770P.
PR 08-AUG-2001; 2001US-0310889P.
PR 04-DEC-2001; 2001US-0337219P.
XX (UYDE ) UNIV DELAWARE.
XX Kmiec EB, Parekh-Olmado H;
XX WPI; 2003-256478/25.
XX
XX New single stranded oligonucleotides comprising a DNA domain having at
PT least one mismatch with respect to the genetic sequence of the
PT Huntington's disease gene to be altered, useful for treating or
PT preventing Huntington's disease.
XX
XX Example 1; Fig 6a; 133pp; English.
XX
XX The present sequence is that of a portion of a 52-mer RNA/DNA chimeric
CC oligonucleotide of the glutamine (CAG) that is targeted to triplet
CC repeat region (see ABZ81767) of exon 1 of the human Huntington's disease
CC (HD) gene. This targeting results in a CAG to TAG (stop codon) nucleotide
CC exchange due to sliding of the repeat region, a phenomenon that can occur
CC with the methods of this invention. The oligonucleotide is an example of
CC claimed oligonucleotides of the invention for targeted alteration of the
CC HD gene. Such oligonucleotides can be used for the treatment or
CC prevention of HD
XX
SQ Sequence 25 BP; 0 A; 8 C; 9 G; 0 T; 8 U; 0 Other;
Query Match 0.1%; Score 19; DB 1; Length 25;
Best Local Similarity 68.4%; Pred. No. 8,9e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 1 GCUGCUGCUGCUGCUGCUG 19
RESULT 2225
ABK88725
ID ABK88725 standard; DNA; 22 BP.
XX
AC ABK88725;
XX
XX 07-OCT-2002 (first entry)
XX
XX Human Pur alpha anti-sense strand, phosphorothioate oligonucleotide #4.
DE
XX Human; apoptotic cell death; proteinaceous transcription factor;
KM regulation of gene transcription; apoptosis; p53; CD95; TRA;
KM transcripional regulator of apoptosis; Y-box family; YB-1; cancer;
KM tumour cell; embryonic cell; nervous system; intracellular pathogen;
KM DNA-damaging agent; retroviral infection; neurodegenerative disorder;
KM immune system dysfunction; anti-tumour; cytostatic; Pur alpha;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..22
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate internucleotide linkages"
XX
XX WO200244363-A1.
XX
XX 06-JUN-2002.
XX
XX 28-NOV-2001; 2001WO-NZ000287.
XX
XX 28-NOV-2000; 2000US-00724809.
XX
XX (GENE-) GENESIS RES & DEV CORP LTD.
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XX Lasham A, Watson JD;
XX WPI; 2002-557540/59.
XX
XX Modulating p53-mediated apoptotic cell death in a population of cells, by
XX PT modulating the amount of a transcriptional regulator of apoptosis
XX PT available to bind to a target polynucleotide in the cells.
XX
XX Example 2; Page 57; 62pp; English.
XX
XX The present invention relates to methods for modulating apoptotic cell
XX death using proteinaceous transcription factors that regulate the
XX transcription of genes encoding proteins involved in apoptosis (e.g. CD95
XX and p53). The methods involve modulating the amount of a transcriptional
XX regulator of apoptosis (TRA) available to bind to a target polynucleotide
XX in the cells, where TRA is a member of the Y-box nucleic acid binding
XX family of polypeptides (e.g. YB-1). The methods of the invention are
XX useful for modulating apoptotic cell death in a population of cells,
XX where the cells are selected from tumour cells, cells of the immune
XX system, embryonic cells, cells of the nervous system, or cells infected
XX with intracellular pathogens. The methods are also useful for increasing
XX the sensitivity of tumour cells to a DNA-damaging agent, and for
XX increasing sensitivity to apoptosis in a population of cells harbouring
XX intracellular pathogens. The methods are useful for screening an
XX apoptosis modulatory agent that modulates the binding of TRA. The methods
XX for regulating apoptosis can be used therapeutically and prophylactically
XX for various disorders such as cancer, viral and retroviral infections,
XX neurodegenerative disorders, and immune system dysfunction. The present
XX sequence represents a phosphorothioate oligonucleotide to the anti-sense
XX strand of human Pur alpha
XX
XX Sequence 22 BP; 0 A; 5 C; 9 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.8; DB 1; Length 22;
XX Best Local Similarity 90.9%; Pred. No. 7.9e+02;
XX Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 176 GCTGCTGCTGCTGCTGCTGCGC 197
XX Db 1 GCTGCTGCTGCTGCTGCTGCGT 22
XX
XX RESULT 2226
XX ADQ13663/C
XX ID ADQ13663 standard; DNA; 23 BP.
XX AC
XX ADQ13663;
XX AC
XX 07-OCT-2004 (first entry)
XX DT
XX DMD region PCR primer, SEQ ID 58.
XX DB
XX Human; SCAIP; dystrophin; Duchenne Muscular Dystrophy; DMD;
XX KM Becker Muscular Dystrophy; BMD; PCR; primer; ss;
XX KM Single Condition Amplification/ Internal Primer.
XX OS
XX Homo sapiens.
XX
XX WO2004058985-A2.
XX PN
XX 15-JUL-2004.
XX PD
XX 17-DEC-2003; 2003WO-US040278.
XX PF
XX 17-DEC-2002; 2002US-0433774P.
XX PR
XX (UTAH ) UNIV UTAH RES FOUND.
XX PA
XX
XX Flanigan KM, Weiss RB, Dunn DM, Von Niederhausern A;
XX WPI; 2004-525893/50.
XX

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PT Characterizing a nucleic acid region, useful for detecting genetic
PT mutations in any large multi-exon gene e.g., those indicating
PT dystrophinopathy, comprises using a Single Condition
PT Amplification/Internal Primer (SCAIP) sequencing method.
XX
XX Example 1; Page 30; 174pp; English.
XX
XX The present invention relates to a Single Condition Amplification/
XX Internal Primer (SCAIP) sequencing method for direct sequence analysis of
XX large multi-exon genes from genomic DNA samples and identifying mutations
XX in multi-exon genes e.g. the dystrophin gene, CAPN3 gene and DISF gene.
XX Mutations in the dystrophin gene result in both Duchenne Muscular
XX Dystrophy (DMD) and Becker Muscular Dystrophy (BMD). Mutations in the
XX CAPN3 gene, encoding calpain (calcium-activated neutral protease) result
XX in limb-girdle muscular dystrophy type 2A (LGMD2A) and mutations in the
XX DISF gene, encoding dysferlin, result in limb-girdle muscular dystrophy
XX type 2B (LGMD2B). The method comprises bringing into contact in each of
XX the reaction chambers an amplicon from a different one of the
XX amplification reactions and one or more internal sequencing primers
XX corresponding to the amplicon and analysing the sequences of the
XX amplicons. The method allows for the rapid, accurate, and economical
XX analysis of any large multi-exon gene. The method is useful in detecting
XX genetic mutations in any large multi-exon gene. It is also useful for the
XX identification and analysis of specific individual genomic mutations
XX including deletions, point mutations, or its combinations, gene complexes
XX with multiple exons/intons spanning large genomic regions. The present
XX sequence is a PCR primer, used in the method of the invention.
XX
XX Sequence 23 BP; 7 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.8; DB 1; Length 23;
XX Best Local Similarity 90.9%; Pred. No. 8.4e+02;
XX Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 4323 CTGCTTTCCTACATGTCAG 4344
XX Db 23 CTGATTTCTAGATGTGCAAG 2
XX
XX RESULT 2227
XX ABX03813
XX ID ABX03813 standard; cDNA; 24 BP.
XX AC
XX ABX03813;
XX AC
XX 09-JAN-2003 (first entry)
XX DT
XX DNA encoding secreted protein signal peptide sequence #22.
XX DE
XX Differential display method; leucine-rich motif; transmembrane protein;
XX KM secreted protein; secreted protein signal peptide; ss.
XX KM
XX Unidentified.
XX OS
XX WO200259259-A2.
XX PN
XX 01-AUG-2002.
XX PD
XX 23-JAN-2002; 2002WO-IL000071.
XX PF
XX 23-JAN-2001; 2001US-0263158P.
XX PR
XX (UTRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.
XX PA
XX Wreschner DH;
XX PI
XX WPI; 2002-599769/64.
XX DR
XX P-PsDB; ABG98342.
XX DR
XX Differential display method for identifying secreted or transmembrane
XX PT protein, comprises contacting a DNA with a first primer that hybridizes
XX PT to a sequence coding for a leucine-rich motif and with a second
XX PT oligonucleotide primer.

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CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
Query Match
Best Local Similarity 95.0%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2878 TAAAGCTGGAGCTGAAG 2897
Db 20 TAAAGCTGGAGCTGAAG 1
RESULT 2230
AAAS5806
ID AAAS5806 standard; DNA; 20 BP.
XX
AC AAAS5806;
XX
DT 01-SEP-2000 (first entry)
XX
DE Human histone deacetylase HD2 antisense oligonucleotide SEQ ID NO:51.
XX
KW Human; DNA methyltransferase; DNA Methylase; antisense oligonucleotide;
KW modulation; inhibition; gene expression; combination therapy; p16;
KW histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;
KW methylation; gene therapy; tumour; cytostatic; antiasthmatic;
KW antiinflammatory; inflammation; asthma; ss.
XX
OS Homo sapiens.
XX
PN WO200023112-A1.
XX
PD 27-APR-2000.
XX
PF 19-OCT-1999; 99WO-US024278.
XX
PR 19-OCT-1998; 98US-0104804P.
XX
PA (METH-) METHYLGENE INC.
XX
PI Besterman JM, Macleod AR, Sidere WM;
XX
DR WPI; 2000-339532/29.
XX
PT Inhibiting gene expression e.g. DNA methyltransferase, by treating cells
PT with a synergistic amount of antisense oligonucleotide and protein
PT effectors e.g. 5-aza-cytidine of gene products, useful for gene therapy
PT of e.g. tumors.
XX
PS Disclosure; Page 29; 99pp; English.
XX
CC The present invention describes a method for inhibiting the expression of
CC a gene in a cell comprising contacting the cell with an effective
CC synergistic amount of an antisense oligonucleotide which inhibits
CC expression of the gene, and an effective synergistic amount of a protein
CC effector of a product of the gene. Also described are: (1) a method for
CC treating a disease responsive to inhibition of a gene in a mammal; (2) a
CC method for inhibiting tumour growth in mammal; (3) an inhibitor of a gene
CC comprising an antisense oligonucleotide which inhibits expression of the
CC gene in operable association with a protein effector of a gene product;
CC and (4) a pharmaceutical composition comprising the inhibitor of (3). The
CC methods and compositions are useful as analytical tools for transgenic
CC studies and as therapeutic tools, e.g. as gene therapy tools for human
CC diseases including benign and malignant tumours, inflammation or asthma.
CC The methods, inhibitors and compositions of the invention that inhibit
CC expression or activity of a gene or gene product may be used to treat
CC patients having, or predisposed to developing, a disease responsive to
CC inhibition of the gene. These may also be used to activate silenced genes
CC to provide missing gene functions and improve a given condition.
CC Furthermore, the methods and compositions are useful as probes of the
CC physiological function of a gene product in an experimental cell culture
CC or animal system; and to evaluate the effect of inhibiting gene activity
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CC or expression, AAAS5758 to AAAS5842 represent oligonucleotide sequences
CC which are used in the exemplification of the present invention
XX
SQ Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;
Query Match
Best Local Similarity 95.0%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 178 TGCTGCTGCTGCTGCTGCG 197
Db 1 TGCTGCTGCTGCTGCTGCG 20
RESULT 2231
AAH43116
ID AAH43116 standard; DNA; 20 BP.
XX
AC AAH43116;
XX
DT 19-SEP-2001 (first entry)
XX
DE Antisense oligo, target HDAC-2 121-141.
XX
KW Antisense; histone deacetylase; HDAC-1; HDAC-2; HDAC-4; inhibitor;
KW cell proliferation; cancer; restenosis; psoriasis; protozoal infection;
KW fungal infections; ss.
XX
OS Synthetic.
XX
PN WO200138322-A1.
XX
PD 31-MAY-2001.
XX
PF 22-NOV-2000; 2000WO-1B001881.
XX
PR 23-NOV-1999; 99US-0167035P.
XX
PA (METH-) METHYLGENE INC.
XX
PI Delorme D, Ruel R, Lavoie R, Thibault C, Abou-Khalil E;
XX
DR WPI; 2001-432601/46.
XX
PT New inhibitors of histone deacetylase e.g. N-hydroxy-5-(4-
PT (benzenesulfonylamino)-phenyl)-4-yn-2-pentanamide for treating cancer,
PT restenosis or fungal infections.
XX
PS Disclosure; Page 40; 147pp; English.
XX
CC The sequences given in AAH43115-21 are oligonucleotides which are
CC antisense to the histone deacetylase gene, HDAC-2. These oligonucleotides
CC may be used in combination with an inhibitor of histone deacetylase
CC enzyme function, to given an improved inhibitory effect, thereby reducing
CC the amount of inhibitor required to obtain a given inhibitory effect.
CC Compounds containing these oligonucleotides may be used to treat cell
CC proliferation conditions such as cancer, restenosis or psoriasis. They
CC can also be used to treat protozoal and fungal infections
XX
SQ Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;
Query Match
Best Local Similarity 95.0%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 178 TGCTGCTGCTGCTGCTGCG 197
Db 1 TGCTGCTGCTGCTGCTGCG 20
RESULT 2232
AAC89545
ID AAC89545 standard; DNA; 20 BP.
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XX AAC89545;
XX 08-MAR-2001 (first entry)
XX DE Human HDAC-2 antisense sequence SEQ ID NO: 15.
XX XX
XX Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
XX HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
XX gene therapy; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200071703-A2.
XX PD 30-NOV-2000.
XX PF 03-MAY-2000; 2000WO-IB001252.
XX PR 03-MAY-1999; 99US-0132287P.
XX PA (METH-) METHYLENE INC.
XX PI Macleod AR, Li Z, Besterman JM;
XX DR WPI; 2001-016407/02.
XX PT Antisense oligonucleotide that inhibits expression of a histone
XX deacetylase, useful for treating and/or alleviating the symptoms of
XX neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX PS Example 1; Page 24; 125pp; English.
XX CC The present invention provides inhibitors of histone deacetylase enzymes
XX such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX inhibitors may be antisense strands or they may be compounds identified
XX by contacting the enzyme with the compound and measuring the resulting
XX enzyme activity. These inhibitors are useful for treating cancers and for
XX identifying which histone deacetylase is involved in a neoplasia
XX CC
XX SQ Sequence 20 BP; 0 A; 7 C; 7 G; 4 T; 2 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 7.7e+02;
XX Matches 17; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 178 TGCTGCTGCTGCTGCTGCG 197
XX Db 1 UGCTGCTGCTGCTGCTGCG 20
XX
XX RESULT 2233
XX AAC89536
XX ID AAC89536 standard; DNA; 20 BP.
XX XX
XX AC AAC89536;
XX XX
XX DT 08-MAR-2001 (first entry)
XX XX
XX DE Human HDAC-2 PCR primer SEQ ID NO: 6.
XX XX
XX KM Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
XX KM HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
XX KM gene therapy; PCR primer; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200071703-A2.
XX PD 30-NOV-2000.
XX PF 03-MAY-2000; 2000WO-IB001252.
XX XX
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PR 03-MAY-1999; 99US-0132287P.
XX XX
XX PA (METH-) METHYLENE INC.
XX XX
XX PI Macleod AR, Li Z, Besterman JM;
XX DR WPI; 2001-016407/02.
XX XX
XX PT Antisense oligonucleotide that inhibits expression of a histone
XX deacetylase, useful for treating and/or alleviating the symptoms of
XX neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX PS Disclosure; Page 12; 125pp; English.
XX CC
XX CC The present invention provides inhibitors of histone deacetylase enzymes
XX such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX inhibitors may be antisense strands or they may be compounds identified
XX by contacting the enzyme with the compound and measuring the resulting
XX enzyme activity. These inhibitors are useful for treating cancers and for
XX identifying which histone deacetylase is involved in a neoplasia
XX CC
XX SQ Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 178 TGCTGCTGCTGCTGCTGCG 197
XX Db 1 TGCTGCTGCTGCTGCTGCG 20
XX
XX RESULT 2234
XX AB286068
XX ID AB286068 standard; DNA; 20 BP.
XX XX
XX AC AB286068;
XX XX
XX DT 17-OCT-2003 (first entry)
XX XX
XX DE Human oligonucleotide sequence.
XX XX
XX KM Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KM antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KM lung inflammation; respiratory disease; de.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200285308-A2.
XX PD 31-OCT-2002.
XX PF 23-APR-2002; 2002WO-US013135.
XX PR 24-APR-2001; 2001US-0286137P.
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI NYce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-229219/22.
XX XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
XX PT respiration, has oligo(s) antisense to specific gene(s) or its
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX PT ubiquinone.
XX PS Claim 15; SEQ ID NO 1310; 872pp; English.
XX XX
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CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 18.4; DB 1; Length 20;

XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;

XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 175 CGCTGCTGCTGCTGCTGCTG 194

DB 1 CGCTGCTGCTGCTGCTGCG 20

#### RESULT 2235

AB286067 standard; DNA; 20 BP.

AC AB286067;

DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Claim 15; SEQ ID NO 1309; 872bp; English.

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences

XX Sequence 20 BP; 0 A; 8 C; 6 G; 6 T; 0 U; 0 Other;

XX Query Match 0.1%; Score 18.4; DB 1; Length 20;

XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;

XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 169 TGCCTGCGCTGCTGCTGCTG 188

DB 1 TGCCTGCGCTGCTGCTGCTG 20

#### RESULT 2236

AB286071 standard; DNA; 20 BP.

AC AB286071;

DT 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Claim 15; SEQ ID NO 1313; 872bp; English.

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SO Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 194  
DB 1 CGCGCTGCTGCTGCTGCTG 20

RESULT 2237

ABZ86075 standard; DNA; 20 BP.

AC ABZ86075;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KM antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;  
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KM lung inflammation; respiratory disease; ds.

OS Homo sapiens.

PN WO200285308-A2.

PD 31-OCT-2002.

PE 23-APR-2002; 2002WO-US013135.

PR 24-APR-2001; 2001US-0286137P.

PA (EPIC-) EPIGENESIS PHARM INC.

PI NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.

PS Claim 15; SEQ ID NO 1317; 872bp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytosstatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX

SO Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 194  
DB 1 CGCGCTGCTGCTGCTGCTG 20

RESULT 2238

ABD22298 standard; DNA; 20 BP.

AC ABD22298;

DT 29-JUL-2004 (first entry)

DE Human stemlocalcin-derived oligo SEQ ID 1310.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KM surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KM analgesic; hypotensive; immunosuppressive; cytosstatic; cystic fibrosis;  
KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KM pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

PD 31-OCT-2002.

PE 23-APR-2002; 2002WO-US013143.

PR 24-APR-2001; 2001US-0286036P.

PA (EPIC-) EPIGENESIS PHARM INC.

PI NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

DR WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

XX

PS Claim 15; SEQ ID NO 1310; 763bp; English.

XX This invention describes a novel composition (a) a first active agent,  
 XX comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers; (b) the oligonucleotides; (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 175 CGCTGCTGCTGCTGCTGCTG 194  
 |||||  
 Db 1 CGCTGCTGCTGCTGCTGCTG 20

RESULT 2239  
 ABD22297  
 ID ABD22297 standard; DNA; 20 BP.

XX AC ABD22297;  
 XX DT 29-JUL-2004 (first entry)

XX DE Human stannocalcin-derived oligo SEQ ID 1309.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KM surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KM pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.  
 XX PN WO200285309-A2.  
 XX PD 31-OCT-2002.  
 XX PF 23-APR-2002; 2002WO-US013143.  
 XX PR 24-APR-2001; 2001US-0286036P.

PA (EPIC-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,  
 PI Miller S, Tang L, Shahabuddin S;  
 XX WPI; 2003-093058/08.

XX PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.

XX PS Claim 15; SEQ ID NO 1309; 763bp; English.

XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers; (b) the oligonucleotides; (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 0 A; 8 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 169 TGCTTCGCTGCTGCTGCTG 188  
 |||||  
 Db 1 TGCTTCGCTGCTGCTGCTG 20

RESULT 2240  
 ABD22301  
 ID ABD22301 standard; DNA; 20 BP.

XX AC ABD22301;  
 XX DT 29-JUL-2004 (first entry)

XX DE Human stannocalcin-derived oligo SEQ ID 1313.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KM surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KM	pulmonary transplantation rejection; ss; primer.
XX	Homo sapiens.
OS	
PX	WO200285309-A2.
NN	
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013143.
XX	
PR	24-APR-2001; 2001US-0286036P.
XX	
PA	(EPIC-) EPIGENESIS PHARM INC.
XI	Nyce JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Aguilar D;
PI	Miller S, Tang L, Shahabuddin S;
XX	
DR	WPI; 2003-093058/08.
XX	
PS	Claim 15; SEQ ID NO 1313; 763pp; English.
XX	
CC	This invention describes a novel composition (a) a first active agent,
CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device, in separate containers, (b) the oligonucleotides, (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target mRNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;
Query Match	0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity	95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	
OY	175 CGCAGCGTGTGCTGTGCTG 194       
DB	1 CGCGCTGTCTGTCTGTGCTG 20
RESULT 2241	
ABD22305	
ID ABD22305 standard; DNA; 20 BP.	
XX	
NC	ABD22305;

[illegible]

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 175 CGCTGCTGCTGCTGCTG 194  
 |||||  
 DB 1 CGCGCTGCTGCTGCTG 20

RESULT 2242  
 ADH18706  
 ID ADH18706 standard; DNA; 20 BP.  
 XX  
 AC ADH18706;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 695.  
 XX  
 KW apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PT 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 PI WPI: 2004-022840/02.  
 XX  
 DR WPI: 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 695; 405bp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiact, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human Apob antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3250 GTGGAGCGAGCTGAGGCT 3269  
 |||||  
 DB 1 GCGCGAGCGAGCTGAGGCT 20

RESULT 2243  
 ADH18708  
 ID ADH18708 standard; DNA; 20 BP.  
 XX  
 AC ADH18708;  
 XX

DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 697.  
 XX  
 KW apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 XX  
 PT 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 PI WPI: 2004-022840/02.  
 XX  
 DR WPI: 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Claim 1; SEQ ID NO 697; 405bp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiact, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the human Apob antisense  
 CC inhibition target DNA of the invention.  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3244 CAGAGGTCGAGGAGCT 3263  
 |||||  
 DB 1 CAGAGGTCGAGGAGCT 20

RESULT 2244  
 ADH18703  
 ID ADH18703 standard; DNA; 20 BP.  
 XX  
 AC ADH18703;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 692.  
 XX  
 KW apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;  
 KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KW antisense inhibition target; human; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003097662-A1.  
 XX

PD 27-NOV-2003.  
XX  
XX 15-MAY-2003; 2003MO-US015493.  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
XX WPI; 2004-022840/02.  
XX  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 692; 405bp; English.  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human ApoB antisense  
CC inhibition target DNA of the invention.  
XX  
XX Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX 3244 CAGAGGTGCGGAGCAGACT 3263  
Db 1 CAGAGGCGCGGAGCAGACT 20  
XX  
XX  
XX RESULT 2245  
ADH18341/c  
ID ADH18341 standard; DNA: 20 BP.  
XX  
XX ADH18341;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX 2'-MOE gapper antisense oligo targeted to human ApoB DNA 2 - SEQ ID 330.  
XX  
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;  
XX diabetes Type 2; obesity; hyperlipidemia; cardiovascular; gene therapy;  
XX antisense; 2'-O-methoxyethyl gapper; phosphorothioate backbone; 2'-MOE;  
XX human; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003097662-A1.  
XX  
XX 27-NOV-2003.  
XX  
XX 15-MAY-2003; 2003MO-US015493.  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
XX WPI; 2004-022840/02.  
XX

XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 330; 405bp; English.  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
CC MOE) gapper antisense oligo of the invention which has 2'-MOE 'wings', a  
CC phosphorothioate backbone throughout and in which all cytidine residues  
CC are 5-methylcytidines.  
XX  
XX Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX 3244 CAGAGGTGCGGAGCAGACT 3263  
Db 20 CAGAGGCGCGGAGCAGACT 1  
XX  
XX  
XX RESULT 2246  
ADH18342/c  
ID ADH18342 standard; DNA: 20 BP.  
XX  
XX ADH18342;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
XX 2'-MOE gapper antisense oligo targeted to human ApoB DNA 2 - SEQ ID 331.  
XX  
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;  
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;  
XX diabetes Type 2; obesity; hyperlipidemia; cardiovascular; gene therapy;  
XX antisense; 2'-O-methoxyethyl gapper; phosphorothioate backbone; 2'-MOE;  
XX human; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003097662-A1.  
XX  
XX 27-NOV-2003.  
XX  
XX 15-MAY-2003; 2003MO-US015493.  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR 13-NOV-2002; 2002US-0426324P.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Crooke RM, Graham MJ;  
XX WPI; 2004-022840/02.  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
XX  
XX Claim 1; SEQ ID NO 331; 405bp; English.  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
XX

CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
CC phosphorothioate backbone throughout and in which all cytidine residues  
CC are 5-methylcytidines.

XX Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 7.7e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3246 GAAGGTGCGAAGCAGACTGA 3265  
DB 20 GAAGGCGGAGACAGACTGA 1

RESULT 2247

ID ADH18705 standard; DNA; 20 BP.

XX ADH18705;

DT 11-MAR-2004 (first entry)

DE Human apolipoprotein B antisense inhibition target DNA - SEQ ID 694.

XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
XX antisense inhibition target; human; ds.

XX Homo sapiens.

OS WO2003097662-A1.

PN 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

PT New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 694; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human Apob antisense  
CC inhibition target DNA of the invention.

XX Sequence 20 BP; 6 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 7.7e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3248 AGGTGCGAAGCAGACTGAGG 3267  
DB 1 AGGCGGAGACAGACTGAGG 20

RESULT 2248

ID ADH18340/C standard; DNA; 20 BP.

XX ADH18340;

DT 11-MAR-2004 (first entry)

DE 2'-MOE gapmer antisense oligo targeted to human Apob DNA 2 - SEQ ID 329.

XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KW antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
KW human; ss.

XX Homo sapiens.

OS WO2003097662-A1.

PN 27-NOV-2003.

XX 15-MAY-2003; 2003WO-US015493.

XX 15-MAY-2002; 2002US-00147196.

PR 13-NOV-2002; 2002US-0426324P.

XX (ISIS-) ISIS PHARM INC.

XX Crooke RM, Graham MJ;

XX WPI; 2004-022840/02.

PT New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidaemia or cardiovascular disease.

PS Claim 1; SEQ ID NO 329; 405pp; English.

XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
CC phosphorothioate backbone throughout and in which all cytidine residues  
CC are 5-methylcytidines.

XX Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 7.7e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3238 CTCAGCGAAGGCTGCGAAG 3257  
DB 20 CTCAGCGAAGGCTGCGAAG 1

RESULT 2249

ADH18330/C

```

ID ADH18330 standard; DNA; 20 BP.
XX
XX ADH18330;
XX
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human Apob DNA 2 - SEQ ID 319.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 319; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (Apob) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiact, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3249 GGTCCGAGCAGACTGAGGC 3268
XX ||||||||||||||||||
XX Db 20 GGCGCGAAGCAGACTGAGGC 1
XX
XX RESULT 2250
XX ADH18695
XX ID ADH18695 standard; DNA; 20 BP.
XX
XX ADH18695;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 684.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX

```

```

XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 684; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (Apob) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiact, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human Apob antisense
XX inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3249 GGTCCGAGCAGACTGAGGC 3268
XX ||||||||||||||||||
XX Db 1 GGCGCGAAGCAGACTGAGGC 20
XX
XX RESULT 2251
XX ADH18700
XX ID ADH18700 standard; DNA; 20 BP.
XX
XX ADH18700;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 689.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiact; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX

```





XX Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3250 GTGCGAGCAGACTGAGCT 3269  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 GCGGAGCAGACTGAGCT 1

RESULT 2254  
ADH18338/c  
ID ADH18338 standard; DNA; 20 BP.  
XX  
AC ADH18338;  
XX  
XX 11-MAR-2004 (first entry)  
DT  
XX  
XX 2'-MOE gapmer antisense oligo targeted to human Apob DNA 2 - SEQ ID 327.  
DE  
XX  
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KM antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
KM human; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2003097662-A1.  
PN  
XX  
XX 27-NOV-2003.  
PD  
XX  
XX 15-MAY-2003; 2003MO-US015493.  
PF  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR  
XX  
XX 13-NOV-2002; 2002US-0426324P.  
PS  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX  
XX WPI; 2004-022840/02.  
DR  
XX  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
PS  
XX  
XX Claim 1; SEQ ID NO 327; 405bp; English.  
PS  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
CC phosphorothioate backbone throughout and in which all cytidine residues  
CC are 5-methylcytidines.  
XX  
XX  
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
XX

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3234 GTAACGACGACAGGCTG 3253  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 GTAACGACGACAGGCTG 1

RESULT 2255  
ADH18526/c  
ID ADH18526 standard; DNA; 20 BP.  
XX  
AC ADH18526;  
XX  
XX 11-MAR-2004 (first entry)  
DT  
XX  
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 515.  
DE  
XX  
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;  
KW anorectic; lipid; cholesterol metabolism; atherosclerosis;  
KW diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
KM antisense inhibition target; human; ds.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO2003097662-A1.  
PN  
XX  
XX 27-NOV-2003.  
PD  
XX  
XX 15-MAY-2003; 2003MO-US015493.  
PF  
XX  
XX 15-MAY-2002; 2002US-00147196.  
PR  
XX  
XX 13-NOV-2002; 2002US-0426324P.  
PS  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Crooke RM, Graham MJ;  
PI  
XX  
XX WPI; 2004-022840/02.  
DR  
XX  
XX  
XX New antisense compound, useful for preparing a composition for treating  
PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
PT 2, obesity, hyperlipidemia or cardiovascular disease.  
PS  
XX  
XX Claim 1; SEQ ID NO 515; 405bp; English.  
PS  
XX  
XX The invention relates to a novel antisense compound targeted to a nucleic  
CC acid molecule encoding human apolipoprotein B (Apob) which specifically  
CC hybridises with and inhibits the expression of human apolipoprotein B.  
CC The compound of the invention demonstrates antiarteriosclerotic,  
CC cardiant, antidiabetic and anorectic activities and may be useful for  
CC preparing a composition for treating abnormal lipid or cholesterol  
CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
CC cardiovascular disease. Furthermore, the compound has gene therapy  
CC applications. The current sequence is that of the human Apob antisense  
CC inhibition target DNA of the invention.  
XX  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;  
XX

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3244 CAGAGCTGGAGCAGACT 3263  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 CAGAGCTGGAGCAGACT 1

RESULT 2256  
ADH18343/c  
ID ADH18343 standard; DNA; 20 BP.  
XX  
AC ADH18343;  
XX  
XX 11-MAR-2004 (first entry)  
DT  
XX  
XX 2'-MOE gapmer antisense oligo targeted to human Apob DNA 2 - SEQ ID 332.  
DE  
XX  
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;

```

KM anorectic; lipid; cholesterol metabolism; atherosclerosis;
KM diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KM antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KM human; ss.
OS Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 332; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiatic, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3248 AGGTGCGAAGCAGACTGAGG 3267
Db 20 AGGCGCGAAGCAGACTGAGG 1
|||||
RESULT 2257
ADH18704
ID ADH18704 standard; DNA; 20 BP.
XX
XX ADH18704;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 693.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiatic; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX

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PF 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidaemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 693; 405bp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (ApoB) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiatic, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the human ApoB antisense
XX inhibition target DNA of the invention.
XX
XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3246 GAAGTGGCGAAGCAGACTGA 3265
Db 1 GAAGGCGCGAAGCAGACTGA 20
|||||
RESULT 2258
ADH18701
ID ADH18701 standard; DNA; 20 BP.
XX
XX ADH18701;
XX
XX 11-MAR-2004 (first entry)
XX
XX Human apolipoprotein B antisense inhibition target DNA - SEQ ID 690.
XX
XX apolipoprotein B; ApoB; antiarteriosclerotic; cardiatic; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense inhibition target; human; ds.
XX
XX Homo sapiens.
XX
XX WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX

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Db      1 CTGCTGCTGCTGCTAGCGGG 20
RESULT 2261
ADN48557/C
ID      ADN48557 standard; DNA; 20 BP.
XX
AC      ADN48557;
XX
DT      12-AUG-2004 (first entry)
DE
XX      Human Notch3 DNA antisense oligonucleotide #1.
XX
KM      Human, Notch3; ss, antisense oligonucleotide; phosphorothioate linkage;
KM      2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KM      hyperproliferative disorder; cancer; cytostatic.
XX
OS      Homo sapiens.
XX
PN      US2004102390-A1.
XX
PD      27-MAY-2004.
XX
PF      21-NOV-2002; 2002US-00301832.
XX
PR      21-NOV-2002; 2002US-00301832.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Freier SM, Dobie KW;
XX
DR      WPI; 2004-399720/37.
XX
PT      New compounds, particularly oligonucleotides targeted to a nucleic acid
PT      encoding Notch3, useful for treating diseases associated with Notch3,
PT      e.g. hyperproliferative disorders.
XX
PS      Example 15; SEQ ID NO 12; 74pp; English.
XX
CC      The invention relates to a compound targeted to a nucleic acid molecule
CC      encoding the human Notch3 polypeptide. The compound is an antisense
CC      oligonucleotide that specifically hybridises with the nucleic acid and
CC      inhibits expression of the polypeptide. The antisense oligonucleotide
CC      comprises at least one modified internucleoside linkage i.e. a
CC      phosphorothioate linkage, at least one modified sugar moiety, preferably
CC      a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC      comprising a 5-methylcytosine. The antisense compounds are useful for
CC      modulating the expression of the human Notch3 polypeptide and in
CC      preparation of a composition for treating hyperproliferative disorders,
CC      e.g. cancer. This sequence represents a human Notch3 DNA antisense
CC      oligonucleotide of the invention.
XX
SQ      Sequence 20 BP; 5 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY      180 CTGCTGCTGCTGCTAGCGGG 199
Db      20 CTGCTGCTGCTGCTAGCGGG 1
RESULT 2262
ADN33067/C
ID      ADN33067 standard; DNA; 20 BP.
XX
AC      ADN33067;
XX
DT      12-AUG-2004 (first entry)
DE
XX      Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 515.
XX

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KM      apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KM      antilipemic; antidiabetic; anorectic; cardiact; vasotropic; hypotensive;
KM      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KM      neuroprotective; nootropic; lipid; cholesterol metabolism;
KM      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KM      von Gierke's disease; lipodystrophy; Cushing's syndrome;
KM      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KM      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KM      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KM      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KM      phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS      Homo sapiens.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1.20
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, optionally 2'-
FT      MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX
PN      NO2004044181-A2.
XX
PD      27-MAY-2004.
XX
PF      13-NOV-2003; 2003WO-US036411.
XX
PR      13-NOV-2002; 2002US-0426234P.
XX
PI      15-MAY-2003; 2003WO-US015493.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR      WPI; 2004-420321/39.
XX
PT      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX
PS      Example 36; SEQ ID NO 515; 483pp; English.
XX
CC      The invention relates to a novel antisense compound where the compound
CC      hybridises to and inhibits expression of mRNA encoding human
CC      apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
CC      confluent HepG2 cells in culture at a concentration of 150 nM. The
CC      compound of the invention demonstrates cardiovascular,
CC      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiact,
CC      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC      endocrine, vasotropic, neuroprotective and nootropic activities and may
CC      be useful for inhibiting the expression of apolipoprotein B in cells or
CC      tissues in vivo in order to address a condition associated with abnormal
CC      lipid or cholesterol metabolism. The compound may be useful for
CC      decreasing circulating lipoprotein levels, triglyceride levels,
CC      reactants and chylomicrons and thus may be utilised during treatment of
CC      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC      cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC      impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to human Apob RNA.
XX
SQ      Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;
Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      3244 CAGAGGTGCGAAGCAGACT 3263
      ||||| ||||| ||||| |||||
Db      20 CAGAGGCGCGAAGCAGACT 1
      ||||| ||||| ||||| |||||

RESULT 2263
AD032885/c
XX      ADO32885 standard; DNA; 20 BP.
XX
XX      ADO32885;
XX
DT      12-AUG-2004 (first entry)
DE      Antisense 2'-MOE gapmer oligo targeted to human Apob-100 RNA - SEQ 333.
XX
XX      Apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX      antilipemic; antidiabetic; anorectic; cardiatic; vasotrophic; hypotensive;
XX      anabolic; eating disorder; cyostatic; endocrine; vasotrophic;
XX      neuroprotective; nootropic; lipid; cholesterol metabolism;
XX      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX      apolipoprotein B-100; Apob-100.
XX
XX      Homo sapiens.
XX
FH      Key
FT      modified_base 1..20
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 32; SEQ ID NO 333; 483bp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, cardiatic,
XX      vasotrophic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX      endocrine, vasotrophic, neuroprotective and nootropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase

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CC      reactants and chylomicrons and thus may be utilised during treatment of
CC      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC      cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC      syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC      impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to human Apob-100 RNA.
XX
SQ      Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
XX
Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3250 GTGCGAAGCAGACTGAGCT 3269
      ||||| ||||| ||||| |||||
Db      20 GCCGGAAGCAGACTGAGCT 1
      ||||| ||||| ||||| |||||

RESULT 2264
AD033245
XX      ADO33245 standard; DNA; 20 BP.
XX
XX      ADO33245;
XX
DT      12-AUG-2004 (first entry)
DE      Human apolipoprotein B (Apob) antisense therapy target DNA - SEQ 693.
XX
XX      Apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX      antilipemic; antidiabetic; anorectic; cardiatic; vasotrophic; hypotensive;
XX      anabolic; eating disorder; cyostatic; endocrine; vasotrophic;
XX      neuroprotective; nootropic; lipid; cholesterol metabolism;
XX      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX      sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX      impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX      obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
XX      antisense target.
XX
XX      Homo sapiens.
XX
XX      WO2004044181-A2.
XX
XX      27-MAY-2004.
XX
XX      13-NOV-2003; 2003WO-US036411.
XX
XX      13-NOV-2002; 2002US-0426234P.
XX      15-MAY-2003; 2003WO-US015493.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX      WPI; 2004-420321/39.
XX
XX      Antisense oligonucleotide compound that inhibits expression of mRNA
XX      encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX      syndrome.
XX
XX      Example 36; SEQ ID NO 693; 483bp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiatic,

```

CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3246 GAAGTGGCAAGCAGACTGA 3265  
 Db 1 GAAGCGCGAAGCAGACTGA 20

RESULT 2265  
 ID ADO33246 standard; DNA; 20 BP.  
 AC ADO33246;  
 XX 12-AUG-2004 (first entry)  
 DT  
 DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 694.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiast; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; de;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tardet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 694; 483bp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiast,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 SQ Sequence 20 BP; 6 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3248 AGGTGGCAAGCAGACTGAGG 3267  
 Db 1 AGGCGCGAAGCAGACTGAGG 20

RESULT 2266  
 ID ADO32871/C standard; DNA; 20 BP.  
 AC ADO32871;  
 XX 12-AUG-2004 (first entry)  
 DT  
 DE Antisense 2'-MOE gapmer oligo targeted to human ApoB-100 RNA - SEQ 319.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiast; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ss;  
 KW apolipoprotein B-100; ApoB-100.  
 XX  
 OS Homo sapiens.  
 XX  
 FN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.

Key Location/Qualifiers  
 modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, optionally 2'-  
 FT MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.

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XX 13-NOV-2002; 2002US-0426234P.
PR 15-MAY-2003; 2003MO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidaemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 31; SEQ ID NO 319; 483bp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antidiabetic, antihyperlipidaemic, antihypertensive, anorectic,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX endocrine, vasoprotective, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB-100 RNA.
XX
XX Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3249 GGTGCGAAGCAGACTGAGC 3268
XX ||||||||||||||||
XX 20 GGCGCGAAGCAGACTGAGC 1
XX
XX RESULT 2267
XX ADO33242
XX ID ADO33242 standard; DNA; 20 BP.
XX
XX ADO33242;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 690.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antihyperlipidaemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;
XX anabolic; eating disorder; cyostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; human; chromosome 2p23-2p24; de;
XX antisense target.
XX

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OS Homo sapiens.
XX
XX NC020040.4:181-A2...
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003MO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003MO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidaemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 36; SEQ ID NO 690; 483bp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antidiabetic, antihyperlipidaemic, antihypertensive, anorectic, cardiatic,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX endocrine, vasoprotective, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of a
XX human apolipoprotein B (ApoB) antisense therapy target DNA of the
XX invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3236 AACTCAAGCAGAGTGCGA 3255
XX ||||||||||||||||
XX 1 AACTCAAGCAGAGTGCGA 20
XX
XX RESULT 2268
XX ADO33243
XX ID ADO33243 standard; DNA; 20 BP.
XX
XX ADO33243;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 691.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
XX antihyperlipidaemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;
XX anabolic; eating disorder; cyostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX

```



KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; de;  
 KW antisense target.  
 OS Homo sapiens.  
 PN WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 691; 483bp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antidiabetic, antihypertensive, antilipemic, antidiabetic, anorectic, cardiant,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3238 CTCAGCAGAAAGTGTGCAAG 3257  
 Db 1 CTCAGCAGAAAGGCGCAAG 20  
 RESULT 2269  
 ADO33416/c  
 ID ADO33416 standard; DNA; 20 BP.  
 XX  
 AC ADO33416;  
 XX  
 XX 12-AUG-2004 (first entry)  
 XX

DE Antisense/mismatch 2'-MOE gapmer oligo targeted to human ApoB SEQ ID 864.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antidiabetic; anorectic; cardiant; vasotropic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; neurotropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss; mismatch.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 methylcytidines"  
 XX  
 XX WO2004044181-A2.  
 XX  
 XX 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 XX  
 XX 13-NOV-2002; 2002US-0426234P.  
 XX  
 XX 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 XX  
 XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 59; SEQ ID NO 864; 483bp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antidiabetic, antihypertensive, antilipemic, antidiabetic, anorectic, cardiant,  
 CC endocrine, vasotropic, neuroprotective and neurotropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense/mismatch 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention  
 CC which is targeted to human ApoB RNA.  
 XX  
 SQ Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;

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Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 3249 GGTGCGAAGCAGACTGAGGC 3268
Db 20 GGTGCGAAGCAGACTGAGGC 1

RESULT 2270
ID ADO33236 standard; DNA; 20 BP.
XX
AC ADO33236;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 684.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW antisense target.
XX
OS Homo sapiens.
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
PS Example 36; SEQ ID NO 684; 483bp; English.
XX
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiac,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,
CC endocrine, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,

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```

CC diabetes, obesity and atherosclerosis. The current sequence is that of a
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
SQ Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy 3249 GGTGCGAAGCAGACTGAGGC 3268
Db 1 GGTGCGAAGCAGACTGAGGC 20

RESULT 2271
ID ADO32883/c standard; DNA; 20 BP.
XX
AC ADO32883;
XX
DT 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapped oligo targeted to human ApoB-100 RNA - SEQ 331.
XX
KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW antilipemic; antidiabetic; anorectic; cardiac; vasotropic; hypotensive;
KW anabolic; eating disorder; cytosstatic; endocrine; vasotropic;
KW neuroprotective; nootropic; lipid; cholesterol metabolism;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW obesity; atherosclerosis; antisense; 2'-MOE gapped; 2'-methoxyethyl wing;
KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss;
KW apolipoprotein B-100; ApoB-100.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note="OTHER = Phosphorothioate backbone, bases 1-5 and
FT 16-20. 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
PN WO200404181-A2.
XX
PD 27-MAY-2004.
XX
PF 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
XX
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
DR WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
PS Example 32; SEQ ID NO 331; 483bp; English.
XX
XX
CC The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%

```

CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC diabetes, obstructive liver disease, Alzheimer's disease, dementia,  
 CC impotence, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob-100 RNA.

XX Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

GY 3246 GAAGTGGGAAGCAGACTGGA 3265  
 DB 20 GAAGCGCGAAGCAGACTGGA 1

RESULT 2272  
 ID ADO32884 standard; DNA; 20 BP.

XX ADO32884;

XX 12-AUG-2004 (first entry)

XX Antisense 2'-MOE gapmer oligo targeted to human Apob-100 RNA - SEQ 332.

KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW apolipoprotein B-100; Apob-100.

XX Homo sapiens.

XX Key Location/Qualifiers  
 XX modified\_base 1..20

XX /tag= a  
 XX /mod\_base= OTHER  
 XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 XX 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 XX methylcytidines"

XX MO2004044181-A2.

XX 27-MAY-2004.

XX 13-NOV-2003; 2003WO-US036411.

XX 13-NOV-2002; 2002US-0426234P.  
 XX 15-MAY-2003; 2003WO-US013493.

PA (ISIS-) ISIS PHARM INC.

PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW,

DR WPI; 2004-420321/39.

XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

XX Example 32; SEQ ID NO 332; 483bp; English.

XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC diabetes, obstructive liver disease, Alzheimer's disease, dementia,  
 CC impotence, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob-100 RNA.

XX Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

GY 3248 AGGTGGGAAGCAGACTGAGG 3267  
 DB 20 AGCGCGAAGCAGACTGAGG 1

RESULT 2273

ID ADO33244 standard; DNA; 20 BP.

XX ADO33244;

XX 12-AUG-2004 (first entry)

XX Human apolipoprotein B (Apob) antisense therapy target DNA - SEQ 692.

KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotropic;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.

XX Homo sapiens.

XX MO2004044181-A2.

```

PD 27-MAY-2004.
XX 13-NOV-2003; 2003WO-US036411.
PF 13-NOV-2003; 2003WO-US036411.
XX 13-NOV-2002; 2002US-0426234P.
PR 13-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
PA Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KM;
PI WPI; 2004-420321/39.
DR WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX Example 36; SEQ ID NO 692; 483bp; English.
PS The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antiarteriosclerotic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,
CC endocrine, vasotropic, neuroprotective and nootropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC diabetes, obstructive liver disease, Alzheimer's disease, dementia, of a
CC human apolipoprotein B (ApoB) antisense therapy target DNA of the
CC invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 3244 CAGAAAGTGGCAGACGACT 3263
Db 1 CAGAAAGTGGCAGACGACT 20
RESULT 2274
AD032880/c
ID AD032880 standard; DNA; 20 BP.
XX
AC AD032880;
XX
XX 12-AUG-2004 (first entry)
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB-100 RNA - SEQ 328.
XX
XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KM antiobolic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KM anabolic; eating disorder; cyostatic; endocrine; vasotropic;
KM neuroprotective; nootropic; lipid; cholesterol metabolism;
KM hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KM Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KM sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KM anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KM impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;

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KM obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KM phosphorothioate backbone; human; chromosome 2p23-2p24; ss;
KM apolipoprotein B-100; ApoB-100.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /+tag= a
XX /mod_base= OTHER
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX W02004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KM;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 32; SEQ ID NO 328; 483bp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cyostatic,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX diabetes, obstructive liver disease, Alzheimer's disease, dementia,
XX impotence, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human ApoB-100 RNA.
XX
XX Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 3236 AACTCAGCAGAAAGTGGCA 3255
Db 20 AACTCAGCAGAAAGTGGCA 1
RESULT 2275
AD033249
ID AD033249 standard; DNA; 20 BP.

```

XX AC ADO33249;  
 XX DT 12-AUG-2004 (first entry)  
 XX DE Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 697.  
 XX  
 XX apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KW antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tardet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 36; SEQ ID NO 697; 483bp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antidiabetic, anorectic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 CY 3244 CAGAAAGTGGCAGACGAGACT 3263

DB DB  
 1 CAGAAAGTGGCAGACGAGACT 20  
 RESULT 2276  
 ADO32879/c  
 ID ADO32879 standard; DNA; 20 BP.  
 XX  
 AC ADO32879;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 XX Antisense 2'-MOE gapper oligo targeted to human ApoB-100 RNA - SEQ 327.  
 XX  
 KW apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;  
 KW antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss;  
 KW apolipoprotein B-100; ApoB-100.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 XX 13-NOV-2003; 2003WO-US036411.  
 PF  
 XX 13-NOV-2002; 2002US-0426234P.  
 PR  
 XX 15-MAY-2003; 2003WO-US015493.  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tardet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 DR  
 XX Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 XX Example 32; SEQ ID NO 327; 483bp; English.  
 PS  
 XX The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antidiabetic, anorectic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of

CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapper oligo of the invention which is  
 CC targeted to human Apob-100 RNA.  
 XX  
 SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3234 GTAAGTCAAGCAGAGGTCG 3253  
 Db 20 GTAAGTCAAGCAGAGGTCG 1  
 RESULT 2277  
 ID ADO33241 standard; DNA; 20 BP.  
 AC ADO33241;  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Human apolipoprotein B (Apob) antisense therapy target DNA - SEQ 689.  
 DE  
 XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KM antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KM anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KM neuroprotective; noctropic; lipid; cholesterol metabolism;  
 KM hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KM Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KM sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KM anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KM impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KM obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KM antisense target.  
 KW  
 XX  
 OS Homo sapiens.  
 XX  
 PN NO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 FT  
 XX  
 XX Example 36; SEQ ID NO 689; 483bp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cytosstatic,

CC endocrine, vasotropic, neuroprotective and noctropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (Apob) antisense therapy target DNA of the  
 CC invention. The human Apob gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3234 GTAAGTCAAGCAGAGGTCG 3253  
 Db 1 GTAAGTCAAGCAGAGGTCG 20  
 RESULT 2278  
 ID ADO32882/c  
 XX ADO32882; standard; DNA; 20 BP.  
 AC ADO32882;  
 XX 12-AUG-2004 (first entry)  
 DT  
 XX Antisense 2'-MOE gapper oligo targeted to human Apob-100 RNA - SEQ 330.  
 DE  
 XX apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KM antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KM anabolic; eating disorder; cytosstatic; endocrine; vasotropic;  
 KM neuroprotective; noctropic; lipid; cholesterol metabolism;  
 KM hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KM Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KM sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KM anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KM impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KM obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;  
 KM phosphorothioate backbone; human; chromosome 2p23-2p24; ss;  
 KM apolipoprotein B-100; Apob-100.  
 KW  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /+tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN NO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 PF  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX

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DR WPI; 2004-420321/39.
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
PS Example 32; SEQ ID NO 330; 483bp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antidiabetic, antilipemic, antidiabetic, anorectic, cardiact,
CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotrophic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB-100 RNA.
XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3244 CAGAAAGCGCGAAGCGACT 3263
Db 20 CAGAAAGCGCGAAGCGACT 1
RESULT 2279
AD032881/C
ID AD032881 standard; DNA; 20 BP.
XX
XX AD032881;
AC
XX 12-AUG-2004 (first entry)
DT
XX
XX Antisense 2'-MOE gapmer oligo targeted to human ApoB-100 RNA - SEQ 329.
XX
XX apolipoprotein B; ApoB; cardiovascular; antidiabetic; cardiact;
XX antilipemic; antidiabetic; anorectic; cardiact; vasotrophic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotrophic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; 88;
XX apolipoprotein B-100; ApoB-100.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /**tag= a
XX /mod_base= OTHER
XX /note="OTHER = Phosphorothioate backbone, bases 1-5 and
FT

```

```

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 32; SEQ ID NO 329; 483bp; English.
XX
XX The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antidiabetic, antilipemic, antidiabetic, anorectic, cardiact,
CC vasotrophic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotrophic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of an
CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC targeted to human ApoB-100 RNA.
XX
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3238 CTTAAGCAGAGGTGCGAAG 3257
Db 20 CTTAAGCAGAGGTGCGAAG 1
RESULT 2280
AD033247
ID AD033247 standard; DNA; 20 BP.
XX
XX AD033247;
AC
XX 12-AUG-2004 (first entry)
DT
XX
XX Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 695.
XX
XX apolipoprotein B; ApoB; cardiovascular; antidiabetic; cardiact;
XX antilipemic; antidiabetic; anorectic; cardiact; vasotrophic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotrophic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX

```

KM hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KM von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KM sexual ateleiotic dwarfism; hyperthyroidism; hypertension;  
 KM anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KM impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KM obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;  
 KM antisense target.  
 XX  
 OS Homo sapiens.  
 XX  
 EN WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 XX  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tardet K, Dobie KM;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 36; SEQ ID NO 695; 483bp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antidiabetic, antihypertensive, antidiabetic, anorectic, cardiatic,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyrostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateleiotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of a  
 CC human apolipoprotein B (ApoB) antisense therapy target DNA of the  
 CC invention. The human ApoB gene is located at chromosome 2p23-2p24.  
 XX  
 SQ Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 7.7e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3250 GTGGAGCAGACGTGAGGCT 3259  
 Db 1 GCGCGAAGCAGACGTGAGGCT 20  
 RESULT 2281  
 ABK70327/c  
 ID ABK70327 standard; DNA; 21 BP.  
 XX  
 AC ABK70327;  
 XX  
 DT 15-JUL-2002 (first entry)

XX  
 XX Synthetic; antisense IGFBP-2-oligodeoxynucleotide (ODN) #15.  
 DE  
 XX Hormone-regulated cancer; antisense oligonucleotide; IGFBP-2;  
 KM insulin-like growth factor binding protein-2; hormone-regulated tumour;  
 KM breast cancer; prostate cancer; IGF-1-sensitive cancer; apoptosis;  
 KM hormone-responsive cancer; hormonal withdrawal; oligodeoxynucleotide;  
 KM ODN; endocrine tumour therapy; ss.  
 XX  
 OS Synthetic.  
 XX  
 EN WO200222642-A1.  
 XX  
 PD 21-MAR-2002.  
 XX  
 PF 13-SEP-2001; 2001WO-US028748.  
 XX  
 PR 14-SEP-2000; 2000US-0232641P.  
 XX  
 PA (UYBR-) UNIV BRITISH COLUMBIA.  
 XX  
 PI Gleave M, Satoshi K, Nelson C, Rennie PS;  
 XX  
 DR WPI; 2002-339861/37.  
 XX  
 PT Composition for treating hormone-regulated cancer, particularly of  
 PT prostate or breast, comprises oligonucleotide antisense to insulin-like  
 PT growth factor binding protein-2.  
 XX  
 PS Claim 3; Page 12; 36pp; English.  
 XX  
 CC The present invention relates to a new composition for treating hormone-  
 CC regulated cancer. The composition comprises an antisense oligonucleotide  
 CC that inhibits expression of IGFBP-2 (Insulin-like growth factor binding  
 CC protein-2). The molecules of the invention are used to delay progression  
 CC of hormone-regulated tumours, particularly of breast or prostate, to the  
 CC hormone-independent state, to delay metastatic progression to the bone of  
 CC IGF-1-sensitive cancers and to treat hormone-responsive cancers by  
 CC inducing apoptosis, after hormonal withdrawal. The present nucleic acid  
 CC sequence represents one of a collection (ABK70313-ABK70375) of antisense  
 CC IGFBP-2-oligodeoxynucleotides (ODN) that were used in the invention for  
 CC prostate and other endocrine tumour therapy  
 XX  
 SQ Sequence 21 BP; 6 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18.4; DB 1; Length 21;  
 Best Local Similarity 95.0%; Pred. No. 8.3e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 175 CGCTGCTGCTGCTGCTGCTG 194  
 Db 20 CGCTGCTGCTGCTGCTGCTG 1  
 RESULT 2282  
 ABZ80286/c  
 ID ABZ80286 standard; DNA; 21 BP.  
 XX  
 AC ABZ80286;  
 XX  
 DT 28-MAY-2003 (first entry)  
 XX  
 DE Mouse Ryk sense PCR primer SEQ ID NO:9.  
 XX  
 XX Purlification; neural stem cell; NSC; undifferentiated; nootropic;  
 KM neuroprotective; antiparkinsonian; gene therapy; nervous system;  
 KM central nervous system; CNS; Alzheimer's disease; Parkinson's disease;  
 KM acute brain injury; CNS dysfunction; tissue regeneration; tissue repair;  
 KM PCR primer; ss.  
 XX  
 OS Mus sp.  
 OS Synthetic.



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PN WO200297067-A1.
XX
XX 05-DEC-2002.
XX
XX 31-MAY-2002; 2002WO-AU000700.
XX
XX 01-JUN-2001; 2001AU-00005403.
XX
XX (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
XX Bartlett PF, Rietze RL;
XX
XX WPI; 2003-140465/13.
XX
XX
XX Generating substantially homogeneous population of undifferentiated cells
XX from sample, by disrupting tissue sample, discriminating cells in
XX population based on size and performing cell-surface marker-
XX discrimination.
XX
XX Example 10; Page 46, 90pp; English.
XX
XX The present invention describes a method (M) for generating a
XX substantially homogeneous population of undifferentiated cells (UC) from
XX a biological sample (BS), which comprises subjecting BS or its sub-sample
XX to tissue-disruption to provide a mixed population (MP) comprising UC,
XX subjecting MP to a cell size-discrimination (SD) step, and simultaneously
XX or sequentially with SD, subjecting the cell population obtained to a
XX cell-surface marker-discrimination step. Also described: (1) a
XX substantially homogeneous population of undifferentiated cells (I)
XX prepared by (M); (2) a composition (II) for use in cell replacement
XX therapy, comprising a population of substantially homogeneous population
XX of neural stem cells (NSCs) generated by (M); and (3) a composition (III)
XX comprising a growth factor identified using a homogeneous population of
XX NSCs generated by (M). (I) can have neurotropic, neuroprotective and
XX antiapoptotic activities, and can be used in gene therapy. (M) is
XX useful for generating a substantially homogeneous population of
XX undifferentiated cells such as NSCs from a biological sample, and is
XX useful for the replacement of neural or non-neural tissue in an animal.
XX (II) is useful in cell replacement therapy in an organ such as the brain
XX or in the nervous system, preferably central nervous system (CNS), for
XX treating a CNS disorder such as Alzheimer's disease, Parkinson's disease,
XX acute brain injury and CNS dysfunction. (I) is useful for the repair or
XX regeneration of tissue. AB280278 to AB280363 represent PCR primers which
XX are used in an example from the present invention for markers defining
XX cell populations
XX
XX Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.3e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1890 CAACTGAAGAAGCTTTGTGGC 1909
XX
XX 20 CAACTGAAGAAGCTTTGTGGC 1
XX
XX
XX RESULT 2283
XX ADD69462 standard; DNA; 23 BP.
XX
XX ADD69462;
XX
XX 15-JAN-2004 (first entry)
XX
XX 5' anchored (ISSR)-PCR primer - SEQ ID 20.
XX
XX inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
XX animal; Basmati rice; ss.
XX
XX Synthetic.
XX
XX WO2003085133-A2.
XX

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XX
XX 16-OCT-2003.
XX
XX 09-JAN-2003; 2003WO-IB000041.
XX
XX 08-APR-2002; 2002IN-CH000260.
XX
XX (DNAF-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX
XX NagaraJu JG;
XX
XX WPI; 2003-804317/75.
XX
XX
XX New set of inter-simple sequence repeats (ISSR)-PCR primers for
XX genotyping eukaryotes, useful for genotyping diverse genomes of plant and
XX animal systems.
XX
XX Claim 1; SEQ ID NO 20; 60pp; English.
XX
XX The invention relates to a novel set of inter-simple sequence repeats
XX (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
XX invention may be useful for genotyping diverse genomes of plant and
XX animal systems, in particular for distinguishing Basmati rice varieties
XX from non-Basmati rice varieties and traditional Basmati rice varieties
XX from evolved Basmati rice varieties. The current sequence is that of the
XX 5' anchored (ISSR)-PCR primer of the invention.
XX
XX Sequence 23 BP; 3 A; 6 C; 7 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18.4; DB 1; Length 23;
XX Best Local Similarity 95.0%; Pred. No. 9.4e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 174 GCGCTGCTGCTGCTGCTGCT 193
XX
XX 4 GAGCTGCTGCTGCTGCTGCT 23
XX
XX
XX RESULT 2284
XX ABI91560/c
XX ID ABI91560 standard; DNA; 24 BP.
XX
XX ABI91560;
XX
XX 15-FEB-2002 (first entry)
XX
XX Capture oligonucleotide zip ID#4582 oligo #1.
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX
XX Synthetic.
XX
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010958.
XX
XX 14-APR-2000; 2000US-0197271P.
XX
XX (CORR ) CORNELL RES FOUND INC.
XX
XX Barany F, Zivvi M, Gerry NP, Favis R, Kliman R;
XX
XX WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX

```

PS Example 5; Fig 25; 300pp; English.  
XX  
CC The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents,  
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
CC medialis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC cancer is specifically associated with a gene selected from BRCA1 gene,  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. AB182074 to  
CC AB197546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 24 BP; 5 A; 7 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 18.2; DB 1; Length 24;  
Best Local Similarity 87.0%; Pred. No. 1e+03;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 4647 AGGATCTTAACACTGGCCGCT 4669  
DB 23 AGGCACTTAACACTGGCTCGCT 1  
|||||  
RESULT 2285  
AB191561 standard; DNA; 24 BP.  
XX  
AC AB191561;  
XX  
DT 15-FEB-2002 (first entry)  
XX  
DE Capture oligonucleotide zip ID#4582 oligo #2.  
XX  
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;  
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;  
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;  
KW oncogene; tumour suppressor; human papillomavirus; forensic;  
KW environmental monitoring; food industry; feed industry; ss.  
XX  
OS Synthetic.  
XX  
PN WO200179548-A2.  
XX  
PD 25-OCT-2001.  
XX  
PF 04-APR-2001; 2001WO-US010958.  
XX  
PR 14-APR-2000; 2000US-0197271P.  
XX  
PA (CORR ) CORNELL RES FOUND INC.  
XX  
PI Barany F, Zilvi M, Gerry NP, Favis R, Kliman R;  
XX  
DR WPI; 2002-034366/04.  
XX  
PT Designing capture oligonucleotide probes for use on a support to which  
XX complementary oligonucleotides hybridize with little mismatch.

PS Example 5; Fig 25; 300pp; English.  
XX  
CC The present invention describes a method (M1) for designing capture  
CC oligonucleotide probes (I) for use on a support to which complementary  
CC oligonucleotide probes (II) will hybridise with little mismatch, where  
CC (I) have melting temperatures within a narrow range. The method is useful  
CC for detecting infectious diseases caused by bacterial infectious agents  
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal  
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and  
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,  
CC Epstein-Barr virus and polio virus, and parasitic infectious agents,  
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus  
CC medialis. The method is also useful for detecting genetic diseases such  
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.  
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes  
CC involved in DNA amplification, replication, recombination or repair, the  
CC cancer is specifically associated with a gene selected from BRCA1 gene,  
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The  
CC method is also used for environmental monitoring, forensics and the food  
CC and feed industry, detecting comprises scanning (using e.g. a scanning  
CC electron microscope and infrared microscope) the support at the  
CC particular sites and identifying if ligation of the oligonucleotide probe  
CC sets occurred and correlating (using a computer) identified ligation to a  
CC presence or absence of the target nucleotide sequences. AB182074 to  
CC AB197546 represent oligonucleotide sequences used in the exemplification  
CC of the present invention  
XX  
SQ Sequence 24 BP; 5 A; 7 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 18.2; DB 1; Length 24;  
Best Local Similarity 87.0%; Pred. No. 1e+03;  
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 4647 AGGATCTTAACACTGGCCGCT 4669  
DB 2 AGGCACTTAACACTGGCTCGCT 24  
|||||  
RESULT 2286  
ADO26495/C  
ID ADO26495 standard; DNA; 24 BP.  
XX  
AC ADO26495;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE PCR primer used to amplify the murine ADIP DNA SegID 6.  
XX  
XX murine; mouse; PCR; ss; afadin dilution domain binding protein; ADIP;  
KW afadin; actinin; binding inhibitor; cardiant; heat disease;  
KW myocardial infarction; myocarditis; primer.  
XX  
OS Mus musculus.  
XX  
PN JP2004135658-A.  
XX  
PD 13-MAY-2004.  
XX  
PF 14-AUG-2003; 2003JP-00293554.  
XX  
PR 27-SEP-2002; 2002JP-00284263.  
XX  
PA (EISA ) EISAI CO LTD.  
XX  
DR WPI; 2004-404616/38.  
XX  
PT New polynucleotide encoding an afadin dilution domain binding protein  
XX having avidity with afadin or actinin, useful for diagnosing heart  
XX diseases e.g. myocardial infarction.  
XX  
PS Example 5; SEQ ID NO 6; 37pp; Japanese.  
XX  
XX This invention relates to a novel isolated nucleic acid encoding an

CC afadin dilution domain binding protein (ADIP) that exhibits an avidity  
 CC with afadin/actinin. Specifically, it refers to screening assays to  
 CC identify compounds that modulate ADIP avidity and provides suitable  
 CC agonists, antagonists and antibodies thereof. The present invention  
 CC provides methods to identify afadin and actinin binding inhibitors  
 CC therapeutically as candidates to diagnose and/or treat heat disease such  
 CC as myocardial infarction or myocarditis. This oligonucleotide sequence is  
 CC a PCR primer used to amplify the murine ADIP DNA sequence of the  
 CC invention.

XX Sequence 24 BP; 5 A; 4 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.1%; Score 18.2; DB 1; Length 24;  
 Best Local Similarity 87.0%; Pred. No. 1e+03;

Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4441 GTCATGTAGAAAACTTGAAC 4463  
 DB 24 GTCATGTAGAAAACTTCATTAAC 2

RESULT 2287  
 ADN97239/C  
 ID ADN97239 standard; DNA; 18 BP.

XX ADN97239;

XX 01-JUN-2004 (first entry)

DE Primer of the invention #47.

XX DNA fingerprinting; Cannabis sativa; short tandem repeat marker;  
 KW forensic identification; marijuana; primer; ss.

XX OS Unidentified.

XX MO2004008841-A2.

XX 29-JAN-2004.

XX 21-JUN-2003; 2003MO-US022887.

XX 19-JUN-2002; 2002US-0397179P.

XX (UYAR-) UNIV ARIZONA.

PA (KEIM/) KEIM P S.

PA (ZINN/) ZINNAMON K.

PI Keim PS, Zinnamon K;

XX WPI; 2004-14139/14.

XX New isolated nucleic acid for amplification of a short tandem repeat  
 PT located in DNA isolated from Cannabis sativa L species, useful for  
 PT forensic identification of marijuana or for linking a marijuana sample to  
 PT its plant source.

XX Example 9; SEQ ID NO 106; 79bp; English.

XX The present invention relates to DNA fingerprinting for Cannabis Sativa  
 CC using short tandem repeat markers. The nucleic acid is useful for  
 CC forensic identification of marijuana or for linking a marijuana sample to  
 CC its plant source. The present sequence represents a primer of the  
 CC invention.

XX Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCT 193  
 ||||||||||||||||||

DB 18 GCTGCTGCTGCTGCT 1

RESULT 2288  
 AD026674

ID AD026674 standard; DNA; 18 BP.

XX AD026674;

XX 12-AUG-2004 (first entry)

DE Synthetic leader sequence encoding DNA SEQ ID NO:67.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX MO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003MO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYOU ) UNIV QUEENSLAND.

PI Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; AD026675.

XX Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

XX Example 1; SEQ ID NO 67; 86bp; English.

XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organism are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism of interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an  
 CC organism of interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected  
 CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide. The method is useful for constructing a  
 CC synthetic polynucleotide from which a polypeptide is producible to confer  
 CC a selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the

CC same polypeptide. It is useful for modulating the quality of a selected  
 CC phenotype displayed by an organism or part. The present sequence encodes  
 CC a synthetic leader sequence, which is used in an example from the present  
 CC invention.

XX Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 1 CTGCTGCTGCTGCTGCTG 18

RESULT 2289  
 ADO26644/c  
 ID ADO26644 standard; DNA; 18 BP.

AC ADO26644;

XX 12-AUG-2004 (first entry)

DE Synthetic leader sequence encoding DNA SEQ ID NO:37.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

OS Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYOU ) UNIV QUEENSLAND.

XX Frazer IH;

DR WPI: 2004-411519/38.

XX P-PsDB; ADO26645.

PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

PS Example 1; SEQ ID NO 37; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organism are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism or interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an  
 CC organism or interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected

CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide. The method is useful for constructing a  
 CC synthetic polynucleotide from which a polypeptide is producible to confer  
 CC a selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. It is useful for modulating the quality of a selected  
 CC phenotype displayed by an organism or part. The present sequence encodes  
 CC a synthetic leader sequence, which is used in an example from the present  
 CC invention.

XX Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 18 CTGCTGCTGCTGCTGCTG 1

RESULT 2290  
 ADO26696/c  
 ID ADO26696 standard; DNA; 18 BP.

XX ADO26696;

XX 12-AUG-2004 (first entry)

DE Synthetic leader sequence encoding DNA SEQ ID NO:89.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

OS Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYOU ) UNIV QUEENSLAND.

XX Frazer IH;

DR WPI: 2004-411519/38.

XX P-PsDB; ADO26697.

PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

PS Example 1; SEQ ID NO 89; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test

organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polynucleotide constructed from the method above; (4) an organism or interest or part containing a synthetic construct that comprises a regulatory polynucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polynucleotide that encodes a reporter protein, which produces, or is predicted to produce a selected phenotype or a phenotype of the same class as the selected phenotype in the organism or part; (5) a method of modulating the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide. The method is useful for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present invention.

Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 176 GCTGCTGCTGCTGCTGCT 193  
Db 18 GCTGCTGCTGCTGCTGCT 1

RESULT 2291  
ID ADO26614 standard; DNA; 18 BP.  
XX ADO26614;  
XX 12-AUG-2004 (first entry)  
XX  
XX Synthetic leader sequence encoding DNA SEQ ID NO:7.  
DE phenotypic preference; phenotype modulation; leader; ds.  
XX phenotypic preference; phenotype modulation; leader; ds.  
XX Synthetic.  
OS  
XX WO2004042059-A1.  
PN 21-MAY-2004.  
PD 10-NOV-2003; 2003WO-AUD01487.  
PE 08-NOV-2002; 2002US-0425163P.  
PR  
XX (UYOU ) UNIV QUEENSLAND.  
PA  
XX Frazer IH;  
PI  
XX  
XX WPI; 2004-411519/38.  
DR P-PSDB; ADO26615.  
XX  
XX  
PT Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first

codon with a synonymous codon to construct the synthetic polynucleotide. Example 1; SEQ ID NO 7; 86pp; English.

The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms or parts, where the test organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polynucleotide constructed from the method above; (4) an organism or interest or part containing a synthetic construct that comprises a regulatory polynucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polynucleotide that encodes a reporter protein, which produces, or is predicted to produce a selected phenotype or a phenotype of the same class as the selected phenotype in the organism or part; (5) a method of modulating the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide. The method is useful for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present invention.

Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 176 GCTGCTGCTGCTGCTGCT 193  
Db 1 GCTGCTGCTGCTGCTGCT 18

RESULT 2292  
ID ADO33424/C  
AD033424 standard; DNA; 18 BP.  
XX  
XX ADO33424;  
XX  
XX 12-AUG-2004 (first entry)  
XX  
XX Antisense 2'-MOE gapmer oligo targeted to human AgOB - SEQ ID 872.  
DE  
XX  
XX apolipoprotein B; AgOB; cardiovascular; antiarteriosclerotic;  
XX antihypertensive; antidiabetic; anorectic; cardiac; vasotrophic; hypotensive;  
XX anabolic; eating disorder; cytosolic; endocrine; vasotrophic;  
XX neuroprotective; noctropic; lipid; cholesterol metabolism;  
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
XX sexual ateliotic dwarfism; hyperthyroidism; hypernatremia;  
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;



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XX SQ Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match
Best Local Similarity 100.0%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3250 GTGCCAGACGACTGAGC 3267
DB 18 GTCCGAGCGACTGAGC 1
RESULT 2294
ADR06261/C
ID ADR06261 standard; DNA; 18 BP.
AC ADR06261;
XX
XX 04-NOV-2004 (first entry)
DT
XX
DE Short tandem (microsatellite) repeat #1.
XX
XX amplification data; DNA marker; biological sample identification;
XX microorganism detection; virus detection; bacteria detection;
XX fungi detection; protozoa detection; HIV-1;
XX human T-cell lymphotropic virus type 1; HTLV-1; Hepatitis B virus; HBV;
XX Hepatitis C virus; HCV; Herpes Simplex virus; paternity screening;
XX genetic screening; prenatal diagnosis; presymptomatic diagnosis;
XX disease carrier detection; forensic chemical analysis;
XX short tandem repeat; microsatellite repeat; ds.
XX
XX Unidentified.
OS
XX
XX US2004157220-A1.
XX
XX 12-AUG-2004.
XX
XX 10-FEB-2003; 2003US-00360854.
XX
XX 10-FEB-2003; 2003US-00360854.
XX
XX 10-FEB-2003; 2003US-00360854.
XX
XX (KURN/) KURNOL P.
XX (WUBB/) WU B.
XX (BANK/) BANKS P.
XX
XX Kurnool P, Wu B, Banks P;
XX
XX WPI; 2004-614752/59.
XX
XX Identifying biological sample of mammal, involves obtaining amplification
XX data indicative of amplification of DNA markers of genomic DNA of mammal,
XX generating indicia indicative of amplification data, associating indicia
XX with sample.
XX
XX Example; Page 19; 39pp; English.
XX
XX The invention describes a method of identifying (M1) a biological sample
XX comprising a biological material of a mammal. The method involves
XX obtaining amplification data indicative of amplification of at least two
XX DNA markers of genomic DNA of the mammal, generating indicia indicative
XX of the amplification data, and associating the indicia with the
XX biological sample, where the indicia is used to identify the biological
XX sample. (M1) is useful in identifying biological sample of a subject
XX undergoing diagnosis to determine whether the subject is afflicted with a
XX particular disease or disorder; for identifying a biological sample of a
XX subject, undergoing screening for genetic lesions or mutations; for
XX identifying a biological sample of a subject, being diagnosed for the
XX presence of target microorganism chosen from virus, bacteria, fungi or
XX protozoa, where the virus includes HIV-1, human T-cell lymphotropic
XX virus type 1 (HTLV-1), Hepatitis B virus (HBV), Hepatitis C virus (HCV)
XX and Herpes Simplex, the bacteria includes Mycobacterium tuberculosis,
XX Rickettsia rickettsii, Ehrlichia chaffeensis, Borrelia burgdorferi and
XX Yersinia pestis, the fungi includes Cryptococcus neoformans, Pneumocystis

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CC carini and Histoplasma capsulatum, and the protozoa is chosen from
CC Trypanosoma cruzi, Leishmania sp., Plasmodium, Entamoeba histolytica,
CC Babesia microti, Giardia lamblia, Cyclospora sp. and Eimeria sp.; in
CC identifying a biological sample of a subject undergoing paternity
CC screening, genetic screening, prenatal diagnosis, presymptomatic
CC diagnosis, disease carrier detection or forensic chemical analysis; in
CC identifying a biological sample during the screening of the plant to
CC detect the presence of the target microorganism, or during carrier
CC detection analysis or forensic chemical analysis of a plant; and in
CC diagnostic medicines, for identification of genetically inherited
CC diseases in humans, family relationship analysis and microbial typing.
CC (M1) enables simultaneous analysis and tracking of biological samples.
CC The molecular barcode of the genomic DNA of the sample can be determined
CC at any time during the collection or processing of a biological sample.
CC This sequence represents an example of a short tandem or microsatellite
CC repeat that can be used in DNA fingerprinting to identify a biological
CC material.
CC
XX SQ Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;
Query Match
Best Local Similarity 100.0%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 177 CTGCTGCTGCTGCTGCTG 194
DB 18 CTGCTGCTGCTGCTGCTG 1
RESULT 2295
ADR79765
ID ADR79765 standard; DNA; 18 BP.
XX
XX ADR79765;
AC
XX
XX 16-DEC-2004 (first entry)
DT
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4259.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.

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PA (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4259; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 18 BP; 6 A; 4 C; 5 G; 3 T; 0 U; 0 Other;  
 XX  
 CC Query Match 0.1%; Score 18; DB 1; Length 18;  
 CC Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
 CC Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4818 GAGAACTACGAGCTGACT 4835  
 DB 1 GAGAACTACGAGCTGACT 18  
 RESULT 2296  
 ADR78534  
 ID ADR78534 standard; DNA; 18 BP.  
 XX  
 AC ADR78534;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3019.  
 XX  
 KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosclastic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.

XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3019; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 18 BP; 4 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
 XX  
 CC Query Match 0.1%; Score 18; DB 1; Length 18;  
 CC Best Local Similarity 100.0%; Pred. No. 7.4e+02;  
 CC Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1007 GATCAACAGCGGCTTCTT 1024  
 DB 1 GATCAACAGCGGCTTCTT 18



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RESULT 2297
ADR79151
ID ADR79151 strand: DNA; 19 BP.
XX
XX ADR79151;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3636.
XX
XX anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX MO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYTAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3636; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nucleic acid sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or

```

```

CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
XX
XX SQ Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 18; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 8.1e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 3781 AAACAGACATGACTTTCC 3798
XX 2 AAACAGACATGACTTTCC 19
XX
XX Db
XX
XX RESULT 2298
XX ADR77547
XX ID ADR77547 strand: DNA; 19 BP.
XX
XX AC ADR77547;
XX
XX 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2032.
XX
XX anti-lipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX MO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYTAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX

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DR WPI; 2004-677362/66.  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2032; 378bp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 CC Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 18; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4363 ATGACCACAAGATACGT 4380  
 DB 1 ATGACCACAAGATACGT 18  
 RESULT 2299  
 ADR79182  
 ID ADR79182 standard; DNA; 19 BP.  
 XX  
 AC ADR79182;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 3667.  
 XX  
 XX anti-lipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosstatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.

XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454862P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3667; 378bp; English.  
 PS  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 CC Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 18; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 4363 ATGACCACAAGATACGT 4380  
 DB 1 ATGACCACAAGATACGT 18  
 RESULT 2300  
 ADR80250



PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 1791; 378bp; English.  
XX  
CC The invention describes a RNA interference (RNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilizing (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nucleic acid sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instructions for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterized by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemia, hypercholesterolemia, statin-resistant  
CC hypercholesterolemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 18; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 8.1e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 3762 CTGGATCAGAGTCCCT 3779  
DB 1 CTGGATCAGAGTCCCT 18  
XX  
RESULT 2302  
AAV68372  
ID AAV68372 standard; DNA; 20 BP.  
XX  
AC AAV68372;  
XX  
XX 10-MAR-1999 (first entry)  
DT  
XX  
DE Adapter primer oligonucleotide #11 for CAG repeat analysis.  
XX  
XX CAG repeat; human; genome analysis; adapter primer; medical diagnostic;  
KM nucleic acid analysis; variation assessment; neurological disease;  
KM Huntington's chorea; PCR suppression; ss.  
XX  
XX Synthetic.  
OS  
XX MO9849345-A1.  
PN  
XX  
XX 05-NOV-1998.  
PD  
XX  
XX 29-APR-1998; 98WO-US008616.  
PF  
XX  
XX 29-APR-1997; 97US-0045078P.  
PR  
XX  
XX (UYBO-) UNIV BOSTON.  
PA  
XX Smith CL;  
PI  
XX  
XX WPI; 1998-594983/50.  
DR

XX  
XX Analysing nucleic acid samples - using amplification primers which  
PT contain CAG or CTG tri-nucleotide repeats for differential display of  
PT samples from different sources.  
XX  
XX Example; Page 31; 44pp; English.  
XX  
XX This sequence represents an adapter primer oligonucleotide. It was used  
CC to isolate CAG repeat containing sequences from the human genome to test  
CC the method of the invention. The method is for analysing nucleic acids in  
CC a sample, and comprises: (a) providing a sample containing nucleic acid,  
CC a first oligonucleotide primer comprising a CTG repeat, a second  
CC oligonucleotide primer comprising a CAG repeat and a polymerase and PCR  
CC reagents; (b) preparing said nucleic acid so that it is amplifiable; (c)  
CC amplifying the nucleic acid with the first and second primers; and (d)  
CC detecting the amplified product. The method is used to distinguish  
CC between the expression of genes in two or more biological samples, e.g.  
CC body fluids, cells, solid tissue or solid and liquid foods. It can be  
CC used in medical diagnostics, e.g. to differentiate between normal and  
CC diseased tissue or to assess the variation within monozygotic twin pairs.  
CC The method allows the isolation and analysis of genome subsets containing  
CC CAG repeats which are known to be important in a number of neurological  
CC diseases including Huntington's chorea. The method uses PCR suppression,  
CC in which only fragments which contain a target repeat are efficiently  
CC amplified. This allows accurate identification of differentially  
CC expressed genes in various cell types. Genome complexity is reduced by  
CC the new method which targets genomic subsets containing CAG repeats  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 1 Other;  
XX  
Query Match 0.1%; Score 18; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 8.7e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
QY 177 CTGCTGCTGCTGCTG 194  
DB 3 CTGCTGCTGCTGCTG 20  
XX  
RESULT 2303  
ADD69519  
ID ADD69519 standard; DNA; 20 BP.  
XX  
AC ADD69519;  
XX  
XX 15-JAN-2004 (first entry)  
DT  
XX  
DE ISSR-related PCR primer 6.  
XX  
XX inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;  
KM animal; Basmati rice; ss.  
XX  
XX Unidentified.  
OS  
XX MO2003085133-A2.  
PN  
XX  
XX 16-OCT-2003.  
PD  
XX  
XX 09-JAN-2003; 2003WO-IB000041.  
PF  
XX  
XX 08-APR-2002; 2002IN-CH000260.  
PR  
XX  
XX (DNAP-) CENT DNA FINGERPRINTING & DIAGNOSTICS.  
PA  
XX Nagaraaju JG;  
PI  
XX  
XX WPI; 2003-804317/75.  
DR  
XX  
XX New set of inter-simple sequence repeats (ISSR)-PCR primers for  
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and  
PT animal systems.  
XX  
XX Disclosure; Page 19; 60pp; English.  
PS

XX The invention relates to a novel set of inter-simple sequence repeats  
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the  
CC invention may be useful for genotyping diverse genomes of plant and  
CC animal systems, in particular for distinguishing Basmati rice varieties  
CC from non-Basmati rice varieties and traditional Basmati rice varieties  
CC evolved from Basmati rice varieties. The current sequence is that of the  
CC ISSR-related PCR primer of the invention.  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 1 Other;  
Query Match 0.1%; Score 18; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 8.7e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 176 GCTGCTGCTGCTGCTGCT 193  
Db 3 GCTGCTGCTGCTGCTGCT 20  
RESULT 2304  
AB285596  
ID AB285596 standard; DNA; 20 BP.  
XX  
AC AB285596;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 838; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 5 C; 8 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 18; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 8.7e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 1 TGCTGCTGCTGCTGCTG 18  
RESULT 2305  
ABD21826  
ID ABD21826 standard; DNA; 20 BP.  
XX  
AC ABD21826;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human stemnocalcin-derived oligo SEQ ID 838.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cyclic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 838; 763pp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal.  
CC Oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has anti-allergic, anti-inflammatory, antiaesthetic,  
CC analgesic, hypotensive, immunosuppressive and cytosratic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX

SO Sequence 20 BP; 0 A; 5 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 8.7e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 178 TGCTGCTGCTGCTGCTG 195  
DB 1 TGCTGCTGCTGCTGCTG 18

RESULT 2306  
AAQ14196/C  
ID AAQ14196 standard; DNA; 21 BP.  
XX  
AC AAQ14196;  
XX  
DT 02-JAN-1992 (first entry)  
XX  
DE Oligonucleotide probe incorporating disulphide linker.  
XX  
XX ss.  
XX  
KM Synthetic.  
XX  
OS  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 8  
FT /\*tag= a  
FT /note= "n = 02-P-O-CH2-CH2-O-CH2-CH2-S-S-CH2-CH2-O- CH2-  
FT CH2-O-P-O3"  
FT  
XX  
XX WO9114696-A.  
XX  
XX PN  
XX PD 03-OCT-1991.  
XX  
XX PF 29-MAR-1990; 90US-00502361.  
XX  
XX PR 29-MAR-1990; 90US-00502361.  
XX  
XX PA (GILE-) GILEAD SCI INC.  
XX  
XX PI Latham JA, Lin KY, Matteucci M;  
XX  
XX DR WPI; 1991-310529/42.  
XX  
XX PT New oligo:nucleotide- transport agent di:sulphide conjugate(s) - for  
XX PT inhibiting nucleotide- expression in therapy and diagnosis of endogenous  
XX PT nucleotide sequences in cells.  
XX  
XX PS Example; Page 37; 67pp; English.  
XX  
XX CC The oligonucleotide has a disulphide linker incorporated into the probe

CC which acts as a hybridisation-triggered crosslinking agent. This will  
CC permit novel diagnostic assay modifications such as the use of  
CC crosslinker to increase probe discrimination and incorporation of a  
CC denaturing wash step to reduce background. Also carrying out  
CC hybridisation and crosslinking at or near the melting temperature of the  
CC hybrid DNA will reduce secondary structure in the target DNA and increase  
CC probe specificity. See also AAQ14195  
XX

SO Sequence 21 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 1 Other;

Query Match 0.1%; Score 18; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. 9.3e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 176 GCTGCTGCTGCTGCTG 194  
DB 19 GCTGCTGCTGCTGCTG 1

RESULT 2307  
ABZ75647  
ID ABZ75647 standard; DNA; 21 BP.  
XX  
AC ABZ75647;  
XX  
DT 15-MAY-2003 (first entry)  
XX  
DE Template (CTGA)6-A3 for second strand synthesis by HIV RT.  
XX  
XX DNA polymerization; drug susceptibility; HIV; reverse transcriptase; RT;  
XX ds.  
XX  
XX OS Synthetic.  
XX  
XX PN WO2002103039-A1.  
XX  
XX PD 27-DEC-2002.  
XX  
XX PF 14-JUN-2002; 2002WO-SR001155.  
XX  
XX PR 14-JUN-2001; 2001US-0297773P.  
XX  
XX PA (CAVI-) CAVIDI TECH AB.  
XX  
XX PI Kaellander C, Pettersson I, Gronowitz S, Shao X;  
XX  
XX DR WPI; 2003-167535/16.  
XX  
XX PT Measuring DNA-dependent DNA polymerization in a biological sample, useful  
XX PT for drug susceptibility testing, comprises measuring the amount of  
XX PT incorporated modified deoxynucleoside triphosphate with the aid of a  
XX PT labeled antibody.  
XX  
XX PS Example 1; Page 33; 36pp; English.  
XX  
XX CC The invention relates to measuring DNA-dependent DNA polymerization in a  
XX CC biological sample and involves measuring the amount of incorporated  
XX CC modified deoxynucleoside triphosphate with the aid of the label of a  
XX CC bound antibody. The method is useful in measuring DNA polymerization for  
XX CC drug susceptibility testing. Sequences ABZ75637-647 represent different  
XX CC templates used for second strand synthesis by HIV reverse transcriptase  
XX CC (RT)  
XX  
XX SQ Sequence 21 BP; 3 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 18; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 9.3e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 177 CTGCTGCTGCTGCTGCTG 194  
DB 1 CTGCTGCTGCTGCTGCTG 18

```
RESULT 2308
AAV81927/C
ID AAV81927 standard; DNA; 21 BP.
XX
AC AAV81927;
XX
DT 08-MAR-1999 (first entry)
XX
DE Caenorhabditis elegans sel-12 deletion screening PCR primer sel-12.R1.
XX
KW Caenorhabditis elegans; sel-12; hop-1; Akt gene; deletion; screening;
KM PCR primer; detection; nematode worm; Alzheimer's disease; presenilin;
XX spermatogenesis; ss.
XX
OS Synthetic.
OS Caenorhabditis elegans.
PM WO9854300-A1.
XX
PD 03-DEC-1998.
XX
PF 28-MAY-1998; 98WO-US011044.
XX
PR 28-MAY-1997; 97US-0047993P.
XX
PA (AXYS-) AXYS PHARM INC.
XX
PI Johnson C, Westlund B, Parry D;
XX WPI, 1999-045363/04.
XX
PT Nematodes containing deletions in the hop-1, sel-12 and spe-4 genes -
PT useful for identifying compounds and genes affecting Alzheimer's disease.
XX
PS Example 1, Page 41; 63pp; English.
XX
CC The present invention describes a nematode having a deletion in the hop-1
CC gene (homologue of presenilin-1) and optionally further in the sel-12
CC (suppressor +/-or enhancer of 11n-12) or spe-4 (spermatogenesis defective)
CC genes. The 3 genes are homologues of the mammalian presenilin genes which
CC affect the onset and course of Familial Alzheimer's Disease (FAD). The
CC nematodes can be used to screen for compounds and genes which affect the
CC course of Alzheimer's disease. The present sequence represents a PCR
CC primer used for screening for sel-12 deletions
XX
SQ Sequence 21 BP; 3 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2702 CAAGCTGAGTAAACTGGA 2722
Db 21 CAAGACTGAGTAACTGGA 1
RESULT 2309
AAA37188
ID AAA37188 standard; DNA; 21 BP.
XX
AC AAA37188;
XX
DT 08-AUG-2000 (first entry)
XX
DE Human PRO1315 forward PCR primer SEQ ID NO:105.
XX
KW Human; PRO polypeptide; membrane bound protein; receptor; diagnosis;
KM transmembrane; secretion; immunoadhesion; pharmaceutical; screening;
XX PCR primer; hybridisation; probe; ss.
XX
OS Homo sapiens.
XX
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PM WO200012708-A2.
XX
PD 09-MAR-2000.
XX
PF 01-SEP-1999; 99WO-US020111.
XX
PR 01-SEP-1998; 98US-0098716P.
PR 01-SEP-1998; 98US-0098749P.
PR 01-SEP-1998; 98US-0098750P.
PR 02-SEP-1998; 98US-0098803P.
PR 02-SEP-1998; 98US-0098821P.
PR 02-SEP-1998; 98US-0098843P.
PR 09-SEP-1998; 98US-0099536P.
PR 09-SEP-1998; 98US-0099586P.
PR 09-SEP-1998; 98US-0099588P.
PR 09-SEP-1998; 98US-0099602P.
PR 09-SEP-1998; 98US-0099642P.
PR 10-SEP-1998; 98US-0099741P.
PR 10-SEP-1998; 98US-0099754P.
PR 10-SEP-1998; 98US-0099763P.
PR 10-SEP-1998; 98US-0099792P.
PR 10-SEP-1998; 98US-0099808P.
PR 10-SEP-1998; 98US-0099812P.
PR 10-SEP-1998; 98US-0099815P.
PR 15-SEP-1998; 98US-0099816P.
PR 15-SEP-1998; 98US-0100385P.
PR 15-SEP-1998; 98US-0100388P.
PR 15-SEP-1998; 98US-0100390P.
PR 16-SEP-1998; 98US-0100584P.
PR 16-SEP-1998; 98US-0100627P.
PR 16-SEP-1998; 98US-0100631P.
PR 16-SEP-1998; 98US-0100662P.
PR 16-SEP-1998; 98US-0100664P.
PR 17-SEP-1998; 98US-0100683P.
PR 17-SEP-1998; 98US-0100684P.
PR 17-SEP-1998; 98US-0100711P.
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PR 17-SEP-1998; 98US-0100919P.
PR 18-SEP-1998; 98US-0100930P.
PR 18-SEP-1998; 98US-0100848P.
PR 18-SEP-1998; 98US-0100849P.
PR 18-SEP-1998; 98US-0101014P.
PR 18-SEP-1998; 98US-0101068P.
PR 18-SEP-1998; 98US-0101071P.
PR 22-SEP-1998; 98US-0101279P.
PR 23-SEP-1998; 98US-0101471P.
PR 23-SEP-1998; 98US-0101472P.
PR 23-SEP-1998; 98US-0101474P.
PR 23-SEP-1998; 98US-0101475P.
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PR 24-SEP-1998; 98US-0101916P.
PR 29-SEP-1998; 98US-0102207P.
PR 29-SEP-1998; 98US-0102240P.
PR 29-SEP-1998; 98US-0102307P.
PR 29-SEP-1998; 98US-0102330P.
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PR 30-SEP-1998; 98US-0102571P.
PR 01-OCT-1998; 98US-0102684P.
PR 01-OCT-1998; 98US-0102687P.
PR 02-OCT-1998; 98US-0102965P.
PR 06-OCT-1998; 98US-0103258P.
PR 06-OCT-1998; 98US-0103449P.
PR 07-OCT-1998; 98US-0103314P.
PR 07-OCT-1998; 98US-0103315P.
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PR 07-OCT-1998; 98US-0103328P.  
PR 07-OCT-1998; 98US-0103335P.  
PR 07-OCT-1998; 98US-0103336P.  
PR 07-OCT-1998; 98US-0103401P.  
PR 08-OCT-1998; 98US-0103633P.  
PR 08-OCT-1998; 98US-0103678P.  
PR 08-OCT-1998; 98US-0103679P.  
PR 14-OCT-1998; 98US-0103711P.  
PR 14-OCT-1998; 98US-0104257P.  
PR 20-OCT-1998; 98US-0104987P.  
PR 20-OCT-1998; 98US-0105000P.  
PR 20-OCT-1998; 98US-0105002P.  
PR 21-OCT-1998; 98US-0105104P.  
PR 22-OCT-1998; 98US-0105169P.  
PR 22-OCT-1998; 98US-0105266P.  
PR 26-OCT-1998; 98US-0105693P.  
PR 26-OCT-1998; 98US-0105694P.  
PR 27-OCT-1998; 98US-0105807P.  
PR 27-OCT-1998; 98US-0105881P.  
PR 27-OCT-1998; 98US-0105882P.  
PR 27-OCT-1998; 98US-0106062P.  
PR 28-OCT-1998; 98US-0106062P.  
PR 28-OCT-1998; 98US-0106023P.  
PR 28-OCT-1998; 98US-0106029P.  
PR 28-OCT-1998; 98US-0106030P.  
PR 28-OCT-1998; 98US-0106032P.  
PR 28-OCT-1998; 98US-0106033P.  
PR 28-OCT-1998; 98US-0106178P.  
PR 29-OCT-1998; 98US-0106248P.  
PR 29-OCT-1998; 98US-0106384P.  
PR 29-OCT-1998; 98US-0108500P.  
PR 30-OCT-1998; 98US-0106464P.  
PR 03-NOV-1998; 98US-0106856P.  
PR 03-NOV-1998; 98US-0106902P.  
PR 03-NOV-1998; 98US-0106905P.  
PR 03-NOV-1998; 98US-0106919P.  
PR 03-NOV-1998; 98US-0106932P.  
PR 10-NOV-1998; 98US-0107783P.  
PR 17-NOV-1998; 98US-0108775P.  
PR 17-NOV-1998; 98US-0108779P.  
PR 17-NOV-1998; 98US-0108787P.  
PR 17-NOV-1998; 98US-0108788P.  
PR 17-NOV-1998; 98US-0108801P.  
PR 17-NOV-1998; 98US-0108802P.  
PR 17-NOV-1998; 98US-0108806P.  
PR 17-NOV-1998; 98US-0108807P.  
PR 17-NOV-1998; 98US-0108867P.  
PR 17-NOV-1998; 98US-0108925P.  
PR 18-NOV-1998; 98US-0108848P.  
PR 18-NOV-1998; 98US-0108849P.  
PR 18-NOV-1998; 98US-0108850P.  
PR 18-NOV-1998; 98US-0108851P.  
PR 18-NOV-1998; 98US-0108852P.  
PR 18-NOV-1998; 98US-0108858P.  
PR 18-NOV-1998; 98US-0108904P.  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Baker K, Goddard A, Gurney AL, Smith V, Watanabe CK, Wood WI;  
XX  
DR WPI; 2000-237871/20.  
XX  
PS  
XX New mammalian DNA sequences encoding transmembrane, receptor or secreted  
PT PRO polypeptides, useful for screening of potential peptide or small  
PT molecule inhibitors of the relevant receptor/ligand interactions.  
XX  
XX Example 34; Page 402; 773bp; English.  
XX  
CC AAA37022 to AAA3714 encode the new isolated human transmembrane,  
CC receptor or secreted PRO polypeptides given in AA199340 to AA199462. The  
CC transmembrane and receptor PRO proteins can be used for screening of  
CC potential peptide or small molecule inhibitors of the relevant  
CC receptor/ligand interactions. The polypeptides and nucleotide sequences

CC encoding then have various industrial applications, including uses as  
CC pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent PCR  
CC primers and hybridisation probes used in the isolation of the PRO  
CC polypeptides from the present invention  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No.9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 175 CGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTG 21  
RESULT 2310  
AAF54275  
ID AAF54275 standard; DNA; 21 BP.  
XX  
AC AAF54275;  
XX  
DT 02-APR-2001 (first entry)  
XX  
DE Primer #26 used in the identification of proteins.  
XX  
KW Secreted; transmembrane; gene therapy; ss.  
XX  
OS Unidentified.  
XX  
PN WO200078961-A1.  
XX  
PD 28-DEC-2000.  
XX  
PF 18-FEB-2000; 2000MO-US004342.  
XX  
PR 23-JUN-1999; 99US-0141037P.  
PR 20-JUL-1999; 99US-0144758P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 01-SEP-1999; 99MO-US020111.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99MO-US028313.  
PR 02-DEC-1999; 99MO-US028551.  
PR 16-DEC-1999; 99MO-US030095.  
PR 05-JAN-2000; 2000MO-US000219.  
PR 06-JAN-2000; 2000MO-US000376.  
XX  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Baker KP, Botstein D, Desnoyers L, Baton DL, Ferrara N, Fong S;  
PI Gao W, Goddard A, Godowski RJ, Grimaldi CJ, Gurney AL, Hillan KJ, CK;  
PI Pan J, Paoni NF, Roy KM, Smith V, Stewart TA, Tumas D, Watanabe CK;  
PI Williams PM, Wood WI;  
XX  
DR WPI; 2001-071395/08.  
XX  
PT Secreted and transmembrane proteins and nucleic acids designated PRO.  
PT useful as hybridization probes, in chromosome and gene mapping and gene  
PT therapy.  
XX  
PS Example 34; Page 416; 787bp; English.  
XX  
CC The present invention relates to secreted and transmembrane proteins.  
CC These proteins and the DNA encoding them may be used as hybridization  
CC probes, in chromosome and gene mapping and in the generation of anti-  
CC sense RNA and DNA. They may also be used used to generate either  
CC transgenic animals or knockout animals which are in turn useful for  
CC development and screening of therapeutically useful reagents. The nucleic  
CC acids may also be used in gene therapy  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 17.8; DB 1; Length 21;



Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21

## RESULT 2311

ACD68312

ID ACD68312 standard; DNA; 21 BP.

XX ACD68312;

DT 17-SEP-2003 (first entry)

XX Novel human secreted and transmembrane protein related primer #23.

Human; secreted and transmembrane protein; PRO; angiogenesis;  
endothelial cell proliferation; wound healing; immune response;  
T-lymphocytes proliferation; neonatal heart hypertrophy; tumour;  
cardiac insufficiency disorder; calcium flux; inflammation;  
vascular endothelial growth factor-stimulated proliferation;  
mamalian kidney mesangial cell proliferation; Berger disease;  
nephropathy; Schanlein-Henoch purpura; celiac disease; Crohn's disease;  
dermatitis herpetiformis; diabetes; haemoglobin switch; insulinaemia;  
pancreatic beta-cell precursor cell differentiation; thalassemias;  
obesity; auditory hair cell regeneration; hearing loss; bone disorder;  
cartilage disorder; sports injury; arthritis; PCR; primer; ss.

XX Homo sapiens.

XX US2003073130-A1.

XX 17-APR-2003.

PF 11-DEC-2001; 2001US-00015869.

XX PR 01-SEP-1998; 98US-0098716P.  
PR 01-SEP-1998; 98US-0098723P.  
PR 01-SEP-1998; 98US-0098749P.  
PR 01-SEP-1998; 98US-0098750P.  
PR 02-SEP-1998; 98US-0098803P.  
PR 02-SEP-1998; 98US-0098821P.  
PR 02-SEP-1998; 98US-0098843P.  
PR 09-SEP-1998; 98US-0099536P.  
PR 09-SEP-1998; 98US-0099598P.  
PR 09-SEP-1998; 98US-0099598P.  
PR 09-SEP-1998; 98US-0099602P.  
PR 09-SEP-1998; 98US-0099642P.  
PR 10-SEP-1998; 98US-0099741P.  
PR 10-SEP-1998; 98US-0099754P.  
PR 10-SEP-1998; 98US-0099763P.  
PR 10-SEP-1998; 98US-0099792P.  
PR 10-SEP-1998; 98US-0099808P.  
PR 10-SEP-1998; 98US-0099812P.  
PR 10-SEP-1998; 98US-0099815P.  
PR 15-SEP-1998; 98US-0099816P.  
PR 15-SEP-1998; 98US-0100385P.  
PR 15-SEP-1998; 98US-0100388P.  
PR 15-SEP-1998; 98US-0100390P.  
PR 16-SEP-1998; 98US-0100584P.  
PR 16-SEP-1998; 98US-0100627P.  
PR 16-SEP-1998; 98US-0100631P.  
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PR 17-SEP-1998; 98US-0100919P.  
PR 17-SEP-1998; 98US-0100930P.  
PR 18-SEP-1998; 98US-0100848P.

PR 18-SEP-1998; 98US-0100849P.  
PR 18-SEP-1998; 98US-0101014P.  
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PR 18-SEP-1998; 98US-0101071P.  
PR 22-SEP-1998; 98US-0101279P.  
PR 23-SEP-1998; 98US-0101471P.  
PR 23-SEP-1998; 98US-0101472P.  
PR 23-SEP-1998; 98US-0101474P.  
PR 23-SEP-1998; 98US-0101475P.  
PR 23-SEP-1998; 98US-0101476P.  
PR 23-SEP-1998; 98US-0101477P.  
PR 23-SEP-1998; 98US-0101479P.  
PR 24-SEP-1998; 98US-0101738P.  
PR 24-SEP-1998; 98US-0101741P.  
PR 24-SEP-1998; 98US-0101915P.  
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PR 29-SEP-1998; 98US-0102207P.  
PR 29-SEP-1998; 98US-0102240P.  
PR 29-SEP-1998; 98US-0102307P.  
PR 29-SEP-1998; 98US-0102330P.  
PR 30-SEP-1998; 98US-0102331P.  
PR 30-SEP-1998; 98US-0102484P.  
PR 30-SEP-1998; 98US-0102487P.  
PR 30-SEP-1998; 98US-0102570P.  
PR 01-OCT-1998; 98US-0102571P.  
PR 01-OCT-1998; 98US-0102684P.  
PR 02-OCT-1998; 98US-0102687P.  
PR 06-OCT-1998; 98US-0102965P.  
PR 06-OCT-1998; 98US-0103258P.  
PR 06-OCT-1998; 98US-0103459P.  
PR 07-OCT-1998; 98US-0103314P.  
PR 07-OCT-1998; 98US-0103315P.  
PR 07-OCT-1998; 98US-0103328P.  
PR 07-OCT-1998; 98US-0103395P.  
PR 07-OCT-1998; 98US-0103396P.  
PR 07-OCT-1998; 98US-0103401P.  
PR 08-OCT-1998; 98US-0103633P.  
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PR 14-OCT-1998; 98US-0103711P.  
PR 20-OCT-1998; 98US-0104257P.  
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PR 21-OCT-1998; 98US-0105104P.  
PR 22-OCT-1998; 98US-0105169P.  
PR 26-OCT-1998; 98US-0105266P.  
PR 26-OCT-1998; 98US-0105933P.  
PR 26-OCT-1998; 98US-0105949P.  
PR 27-OCT-1998; 98US-0105807P.  
PR 27-OCT-1998; 98US-0105881P.  
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PR 29-OCT-1998; 98US-0106248P.  
PR 29-OCT-1998; 98US-0106384P.  
PR 30-OCT-1998; 98US-0108500P.  
PR 30-OCT-1998; 98US-0108502P.  
PR 03-NOV-1998; 98US-0106856P.  
PR 03-NOV-1998; 98US-0106902P.  
PR 03-NOV-1998; 98US-0106905P.  
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PR 03-NOV-1998; 98US-0106932P.  
PR 03-NOV-1998; 98US-0106934P.  
PR 10-NOV-1998; 98US-0107783P.  
PR 17-NOV-1998; 98US-0108775P.  
PR 17-NOV-1998; 98US-0108779P.  
PR 17-NOV-1998; 98US-0108787P.

PR 17-NOV-1998; 98US-0108788P.  
PR 17-NOV-1998; 98US-0108801P.  
PR 17-NOV-1998; 98US-0108802P.  
PR 17-NOV-1998; 98US-0108806P.  
PR 17-NOV-1998; 98US-0108807P.  
PR 17-NOV-1998; 98US-0108867P.  
PR 17-NOV-1998; 98US-0108925P.  
PR 18-NOV-1998; 98US-0108848P.  
PR 18-NOV-1998; 98US-0108849P.  
PR 18-NOV-1998; 98US-0108850P.  
PR 18-NOV-1998; 98US-0108851P.  
PR 18-NOV-1998; 98US-0108852P.  
PR 18-NOV-1998; 98US-0108858P.  
PR 18-NOV-1998; 98US-0108904P.  
PR 22-DEC-1998; 98US-0113296P.  
PR 30-DEC-1998; 98US-0114223P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 16-APR-1999; 99US-0129674P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 20-JUL-1999; 99US-0144758P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 01-SEP-1999; 99WO-US020111.  
PR 15-SEP-1999; 99WO-US021194.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 16-DEC-1999; 99WO-US030095.  
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XX (GETH ) GENENTECH INC.  
XX  
XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;  
PI Williams PM, Wood WI;  
XX  
XX WPI; 2003-585293/55.  
XX  
XX Novel isolated PRO polypeptides e.g. PRO1130, PRO1275, PRO1418, PRO1555,  
PT PRO1787 that modulate glucose or free fatty acid uptake by skeletal  
PT muscle cells, and are useful for treating diabetes, hyper- or hypo-  
PT insulinemia.

Query Match 0.1%; Score 17.8; DB 1; Length 21;

Best Local Similarity 90.5%; Pred. No. 9.8e+02;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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KW adrenal cortical capillary; endothelial cell growth; wound healing;  
KW stimulated T-lymphocyte proliferation; immune response suppression;  
KW neonatal heart hypertrophy; cardiac insufficiency disorder;  
KW vascular endothelial growth factor; inflammation; mononuclear cell;  
KW eosinophil; diabetes; obesity; or hyper-insulinaemia; hypo-insulinaemia;  
KW chondrocyte redifferentiation; bone disorder; cartilage disorder;  
KW sports injury; arthritis; primer.  
XX  
XX Homo sapiens.  
XX  
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XX 06-DEC-2001; 2001US-00006856.  
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PR 16-DEC-1999; 99MO-US030095.
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PR 18-FEB-2000; 2000MO-US004342.
PR 24-FEB-2000; 2000MO-US005004.
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PR 28-FEB-2001; 2001MO-US006520.
PR 01-MAR-2001; 2001MO-US006666.
PR 01-JUN-2001; 2001MO-US017800.
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PR 09-JUL-2001; 2001MO-US021735.
PR 04-SEP-2001; 2001US-00946374.

XX
XX (GETH ) GENENTECH INC.
XX
XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S,
XX Gao W, Goddard A, Godowski PJ, Grimaldi JC, Guiney AL, Hillan KJ,
XX Pan J, Paoni NP, Roy RA, Smith V, Stewart TA, Tumas D, Watanabe CK,
XX Williams PM, Wood WI;
XX WPI; 2003-492259/46.
XX
XX Novel secreted and transmembrane polypeptides and polynucleotides
XX encoding them useful for treating various cardiac insufficiency
XX disorders, bone and/or cartilage disorders such as sports injuries and
XX arthritis.
XX

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9, 8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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XX
OS Homo sapiens.
PN US2003073129-A1.
PD 17-APR-2003.
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PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
XX
XX (GETH ) GENENTECH INC.
XX
XX Baker KP, Bolstein D, Desnoyers L, Eaton DU, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KU;
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
PI Williams PM, Wood WI;
XX
XX WPI; 2003-585292/55.
XX
XX Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the
PT preparation of a medicament for treating a condition responsive to PRO
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
XX Example 34; Page 235; 561pp; English.
XX
XX The invention describes an isolated PRO (secreted and transmembrane)
CC polypeptide (I), having at least 80% sequence identity to a sequence
CC selected from any one of the 123 amino acid sequences given in
Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred.No. 9.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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Db 1 CGCTGCTGCTGCTGCTGCTG 21
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XX Human PRO PCR primer #26.
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XX Human PRO; PCR; ss; protein electrophoresis; chromosome mapping;
XX gene mapping; genetic disorder; primer.
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PR 18-NOV-1998; 98US-0108849P.  
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PR 18-NOV-1998; 98US-0108852P.  
PR 18-NOV-1998; 98US-0108858P.  
PR 18-NOV-1998; 98US-0108904P.  
PR 22-DEC-1998; 98US-0113296P.  
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PR 16-APR-1999; 99US-0129674P.  
PR 23-JUN-1999; 99US-0141037P.  
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PR 15-SEP-1999; 99WO-US021194.  
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PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 16-DEC-1999; 99WO-US030095.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000376.

PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004342.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 17-MAR-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 23-AUG-2000; 2000WO-US023522.  
PR 24-AUG-2000; 2000WO-US023328.  
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PR 28-FEB-2001; 2001WO-US006520.  
PR 01-MAR-2001; 2001WO-US006666.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 04-SEP-2001; 2001US-00946374.  
  
PR (GETH ) GENENTECH INC.  
PR Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
PR Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PR Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;  
PR Williams PM, Wood WI;  
PR WPI; 2003-555602/52.  
  
PR Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the  
PR preparation of a medicament for treating a condition responsive to PRO  
PR polypeptide, and as therapeutic agents e.g. vaccines.  
  
PR XX  
PR XX Example 34; SEQ ID NO 105; 555pp; English.  
PR XX  
PR CC The invention relates to human PRO polypeptides and the polynucleotides  
PR encoding them. The sequences are useful in the preparation of a  
PR medicament for treating a condition responsive to a PRO polypeptide. The  
PR polypeptides are useful in a number of functional biological assays, as  
PR molecular weight markers for protein electrophoresis and as therapeutic  
PR agents. The polynucleotides are useful as hybridisation probes for a cDNA  
  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Oy 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21  
  
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ID ADD70620 standard; DNA; 21 BP.  
AC ADD70620;  
XX 15-JAN-2004 (first entry)  
DT  
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XX  
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
XX immune response; cardiac insufficiency disorder; calcium flux;  
XX umbilical vein endothelial cell; bone disorder; cartilage disorder;  
XX arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
XX Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;  
XX dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
XX  
XX Homo sapiens.  
OS  
XX US2003099625-A1.  
FN

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XX 29-MAY-2003.
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PR 15-SEP-1999; 99WO-US021194.
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PR 18-FEB-2000; 2000WO-US004342.
PR 24-FEB-2000; 2000WO-US005004.
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PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
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PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US006520.
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PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.
XX
XX (GETH ) GENENTECH INC.
PA
XX Baker KP, Botstein D, Desnovers L, Eaton DL, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
PI Williams PM, Wood WI;
DR WPI; 2003-874602/81.
XX
XX Novel isolated PRO polypeptides e.g., PRO1130, PRO1275, PRO1418, PRO1555,
PT PRO1797 affect glucose or free fatty acid (FFA) uptake by skeletal muscle
PT cells and are useful for treating diabetes or hyper- or hypo-insulinemia.
XX
XX Example 34; SEQ ID NO 105; 553bp; English.
PS
XX The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC
XX
XX Query March 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21
RESULT 2316
ADD39697
ID ADD39697 standard; DNA; 21 BP.
XX
XX ADD39697;
AC
XX 15-JAN-2004 (first entry)
DT
XX
XX Human secreted/transmembrane protein PRO1315 PCR primer #1.
DE
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;
KW immune response; cardiac insufficiency disorder; calcium flux;
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
KW Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;
KW dermatitis; herpiformis; Crohn's disease; thalassemia; ss.
XX
XX Homo sapiens.
OS
XX
XX US2003083462-A1.
PN
XX
XX 01-MAY-2003.
PD
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XX 10-DEC-2001; 2001US-00013913.
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XX 05-JAN-1999; 99WO-US000106.
PR 01-SEP-1999; 99WO-US020111.

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PR 02-DEC-1999; 99WO-US028551.
PR 16-DEC-1999; 99WO-US030095.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003465.
PR 18-FEB-2000; 2000WO-US004342.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.
XX
XX (GETH ) GENENTECH INC.
PA
XX Baker KP, Botstein D, Desnovers L, Eaton DL, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
PI Williams PM, Wood WI;
DR WPI; 2003-755122/71.
XX
XX New secreted and transmembrane PRO polypeptides useful for treating
PT cancers, kidney disorders, Crohn's disease, diabetes mellitus, hyper- or
PT hypo-insulinemia, sports injuries and arthritis.
PT
XX
XX Example 34; SEQ ID NO 105; 557bp; English.
PS
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 123 fully defined sequences as
CC given in the specification (including their extracellular domains either
CC or without their associated signal peptides. Also include are the
CC nucleotide (NA) sequences encoding PRO, a vector comprising the PRO NA, a
CC host cell comprising the vector, producing PRO, a chimeric molecule
CC comprising PRO fused to a heterologous amino acid sequence, and an anti-
CC PRO antibody. Pro is useful as molecular weight markers for protein
CC electrophoresis and also for chromosome identification. PRO is also
CC useful for tissue typing. PRO and PRO NA are useful as hybridisation
CC probes for a cDNA library to isolate the full-length PRO cDNA. PRO NA is
CC useful for generating transgenic animals or knock-out animals which are
CC useful in development and screening useful reagents. PRO NA is also
CC useful in gene therapy. PRO1244, PRO1286 and PRO1303 polypeptides are
CC useful for treating cancerous tumours. PRO1250, PRO1418 and PRO1410
CC polypeptides are useful for suppressing immune response. PRO1246
CC polypeptide is useful for treating cardiac insufficiency disorder.
CC PRO1246 polypeptide is also useful for treating tumours. PRO1246 and
CC PRO1561 polypeptide are useful for stimulating calcium flux in human
CC umbilical vein endothelial cells. PRO1265, PRO1250 and PRO1474
CC polypeptides are useful for treating bone and/or cartilage disorders
CC (e.g., arthritis) and wound healing. PRO1130, PRO1275 and PRO1418
CC polypeptides are useful for treating diabetes in skeletal muscle cells
CC and obesity. PRO1265, PRO1244 and PRO1382 polypeptides are useful for
CC treating Berger disease or other nephropathies associated with Schonlein-
CC Henoch purpura, coeliac disease, dermatitis, herpiformis or Crohn's
CC disease. PRO1478, PRO1265, PRO1412, PRO1279, PRO1304, PRO1406, PRO1418,
CC PRO1410 and PRO1575 are useful in treating thalassemias. The present
CC sequence is a PCR primer used to isolate a cDNA encoding a PRO protein of

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CC the invention.  
XX  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9,8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21  
RESULT 2317  
ADD70143  
ID ADD70143 standard; DNA; 21 BP.  
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DT 15-JAN-2004 (first entry)  
XX  
XX Human secreted/transmembrane protein PRO1315 PCR primer #1.  
DE  
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XX Human; PCR; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; neuropathy; Schonlein-Henoch purpura; celiac disease;  
KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
OS Homo sapiens.  
XX  
XX US2003054406-A1.  
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XX 20-MAR-2003.  
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XX 06-DEC-2001; 2001US-00006818.  
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PR 02-SEP-1998; 98US-0098803P.  
PR 02-SEP-1998; 98US-0098821P.  
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PR 09-SEP-1998; 98US-0099596P.  
PR 09-SEP-1998; 98US-0099602P.  
PR 09-SEP-1998; 98US-0099642P.  
PR 10-SEP-1998; 98US-0099741P.  
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PI Gao W, Goddard A, Gocowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Pan U, Paoni NF, Roy WA, Smith V, Stewart TA, Tumas D, Watanabe CK,  
PI Williams PM, Wood WI;  
XX  
XX WPI; 2003-708344/67.  
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XX Novel isolated PRO polypeptide useful for tissue typing, modulating  
XX biological activity of cell, as molecular weight markers in protein  
XX electrophoresis, for treating arthritis, tumor.  
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KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; neuropathy; Schönlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpiformis; Crohn's disease; thalassemia; ss.  
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PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.
XX
XX (GETH ) GENENTECH INC.
XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S,
XX Go W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
XX Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,
XX Williams PM, Wood WI,
XX WPI, 2003-765477/72.
XX
XX New isolated PRO polypeptide such as PRO1560, PRO444, PRO1018, PRO1773,
XX PT PRO1244, PRO1246, useful for treating cancerous tumors, cardiac
XX PT insufficiency disorders, wound healing, Crohn's disease, celiac disease.
XX PS Example 34; SEQ ID NO 105; 555bp; English.
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
XX CC transmembrane protein) having at least 80% amino acid sequence identity
XX
XX Query Match 0.1%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.8e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Oy 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21
RESULT 2321
ADD40174
ID ADD40174 standard; DNA; 21 BP.
XX
XX ADD40174;
AC
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XX 15-JAN-2004 (First entry)
DT
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XX Human secreted/transmembrane protein PRO1315 PCR primer #1.
DE
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;
XX immune response; cardiac insufficiency disorder; calcium flux;
XX umbilical vein endothelial cell; bone disorder; cartilage disorder;
XX arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
XX Berger disease; nephropathy; Schonlein-Henoch purpura; celiac disease;

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PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004342.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 23-AUG-2000; 2000WO-US023522.  
PR 24-AUG-2000; 2000WO-US023528.  
PR 08-NOV-2000; 2000WO-US030952.  
PR 10-NOV-2000; 2000WO-US030873.  
PR 01-DEC-2000; 2000WO-US032578.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 01-MAR-2001; 2001WO-US006666.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 04-SEP-2001; 2001US-00946374.  
XX  
XX (GENTH ) GENENTECH INC.  
XX  
PI Baker KP, Bolstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
PI Geo W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
PI Pan U, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,  
PI Williams PM, Wood WI;  
XX  
DR WPI; 2003-755104/71.  
XX  
PT New isolated PRO polypeptides such as PRO1560, PRO444, PRO1018, PRO1773,  
PT PRO1244, PRO1246, are useful for treating cancerous tumors and cardiac  
PT insufficiency disorders.  
XX  
PS Example 34; SEQ ID NO 105; 550bp; English.  
XX  
CC The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9,8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 2322  
ADE50395  
ID ADE50395 standard; DNA; 21 BP.  
XX  
AC ADE50395;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human secreted/transmembrane protein PRO1315 PCR primer #1.  
XX  
KW Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2003069179-A1.  
XX  
PD 10-APR-2003.

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PF 11-DEC-2001; 2001US-00015393.  
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PR 01-SEP-1998; 98US-0098723P.  
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PR 01-SEP-1998; 98US-0098750P.  
PR 02-SEP-1998; 98US-0098803P.  
PR 02-SEP-1998; 98US-0098821P.  
PR 02-SEP-1998; 98US-0098843P.  
PR 09-SEP-1998; 98US-0099536P.  
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PR 10-SEP-1998; 98US-0099815P.  
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PR 23-SEP-1998; 98US-0101479P.  
PR 24-SEP-1998; 98US-0101738P.  
PR 24-SEP-1998; 98US-0101741P.  
PR 24-SEP-1998; 98US-0101743P.  
PR 24-SEP-1998; 98US-0101915P.  
PR 24-SEP-1998; 98US-0101916P.  
PR 26-SEP-1998; 98US-0102207P.  
PR 26-SEP-1998; 98US-0102240P.  
PR 26-SEP-1998; 98US-0102307P.  
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PR 29-SEP-1998; 98US-0102331P.  
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PR 01-OCT-1998; 98US-0102684P.  
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PR 02-OCT-1998; 98US-0102965P.  
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PR 06-OCT-1998; 98US-0103449P.  
PR 07-OCT-1998; 98US-0103314P.  
PR 07-OCT-1998; 98US-0103315P.  
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PR 07-OCT-1998; 98US-0103395P.



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PR 07-OCT-1998; 98US-0103396P.
PR 08-OCT-1998; 98US-0103401P.
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PR 29-OCT-1998; 98US-0106384P.
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PR 10-NOV-1998; 98US-0107783P.
PR 17-NOV-1998; 98US-0108775P.
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PR 17-NOV-1998; 98US-0108787P.
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PR 18-NOV-1998; 98US-0108904P.
PR 22-DEC-1998; 98US-0113296P.
PR 30-DEC-1998; 98US-0114223P.
PR 05-JAN-1999; 99WO-US000106.
PR 16-APR-1999; 99US-0129674P.
PR 23-JUN-1999; 99US-0141037P.
PR 20-JUL-1999; 99US-0144758P.
PR 26-JUL-1999; 99US-0156698P.
PR 01-SEP-1999; 99WO-US020111.
PR 15-SEP-1999; 99WO-US021194.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 16-DEC-1999; 99WO-US030095.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004342.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.

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PR 22-MAY-2000; 2000WO-US014942.
PR 30-MAY-2000; 2000WO-US014941.
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PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023528.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032578.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.

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(GETH ) GENENTECH INC.

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PI Baker KP, Botstein D, Desnoyers L, Bacon DL, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumes D, Watanabe CK,
PI Williams PM, Wood WT;
XX WPI; 2003-708395/67.

```

Novel secreted and transmembrane PRO polypeptides useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide and as therapeutic agents e.g. vaccines.

Example 34; SEQ ID NO 105; 555pp; English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity

Query Match 0.1%; Score 17.8; DB 1; Length 21;

Best Local Similarity 90.5%; Pred. No. 9.8e+02;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy 175 CGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTG 21

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RESULT 2323

ADE2007

ID ADE20007 standard; DNA; 21 BP.

AC ADE20007;

DT 29-JAN-2004 (first entry)

XX Human secreted/transmembrane protein PRO315 PCR primer #1.

XX Human; PCR: primer; secreted protein; transmembrane protein; PRO; tumour;

XX immune response; cardiac insufficiency disorder; calcium flux;

XX umbilical vein endothelial cell; bone disorder; cartilage disorder;

XX arthritis; wound healing; diabetes; skeletal muscle cells; obesity;

XX Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;

XX dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.

OS Homo sapiens.

XX US2003092883-A1.

PN 15-MAY-2003.

PD 10-DEC-2001; 2001US-00013430.

PF 01-SEP-1998; 98US-0098716P.

PR 01-SEP-1998; 98US-0098723P.

PR 01-SEP-1998; 98US-0098749P.

PR 01-SEP-1998; 98US-0098750P.

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PR 02-SEP-1998; 98US-0098803P.
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PR 02-SEP-1998; 98US-00988843P.
PR 09-SEP-1998; 98US-00999536P.
PR 09-SEP-1998; 98US-00999596P.
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PR 10-SEP-1998; 98US-0099741P.
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PR 23-JUN-1999; 99US-0141037P.
PR 20-JUL-1999; 99US-0144758P.
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PR 30-NOV-1999; 99MO-US028313.
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PR 16-DEC-1999; 99MO-US030095.
PR 05-JAN-2000; 2000MO-US000219.
PR 06-JAN-2000; 2000MO-US000376.
PR 11-FEB-2000; 2000MO-US003565.
PR 18-FEB-2000; 2000MO-US004342.
PR 24-FEB-2000; 2000MO-US005004.
PR 02-MAR-2000; 2000MO-US005841.
PR 15-MAR-2000; 2000MO-US006884.
PR 17-MAY-2000; 2000MO-US013705.
PR 22-MAY-2000; 2000MO-US014042.
PR 30-MAY-2000; 2000MO-US014941.
PR 02-JUN-2000; 2000MO-US015264.
PR 23-AUG-2000; 2000MO-US023522.
PR 24-AUG-2000; 2000MO-US023328.
PR 08-NOV-2000; 2000MO-US030952.
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PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US005220.
PR 01-MAR-2001; 2001WO-US006520.
PR 01-JUN-2001; 2001WO-US006666.
PR 20-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 20-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.
PR XX
PR (GENENTECH INC.)
PR XX
PR Baker KP, Bozstein D, Deanyers L, Eaton DL, Ferrara N, Fong S,
PR P1 Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
PR P1 Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,
PR P1 Williams PM, Wood WL;
PR XX
PR WPI; 2003-765493/72.
PR XX
PR PT New isolated PRO polypeptide useful for tissue typing, modulating
PR PT biological activity of cell, as molecular weight markers in protein
PR PT electrophoresis, for treating arthritis and tumors.
PR XX
PR PS Example 34; SEQ ID NO 105; 555bp; English.
PR XX
PR CC The invention relates to an isolated PRO polypeptide (secreted or
transmembrane protein) having at least 80% amino acid sequence identity
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Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.8e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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QY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21
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RESULT 2324
ADE49918
ID ADE49918 standard; DNA; 21 BP.
XX
XX ADE49918;
AC
XX 29-JAN-2004 (first entry)
DT
XX Human secreted/transmembrane protein PRO1315 PCR primer #1.
DE
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;
KW immune response; cardiac insufficiency disorder; calcium flux;
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
KW Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;
KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.
XX
XX Homo sapiens.
OS
XX
XX US2003082626-A1.
PN
XX
XX 01-MAY-2003.
PD
XX
XX 06-DEC-2001; 2001US-00006116.
PF
XX
XX 01-SEP-1998; 98US-0098716P.
PR 01-SEP-1998; 98US-0098723P.
PR 01-SEP-1998; 98US-0098749P.
PR 01-SEP-1998; 98US-0098750P.
PR 02-SEP-1998; 98US-0098803P.
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PR 09-SEP-1998; 98US-0099536P.
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PR 09-SEP-1998; 98US-0099642P.
PR 10-SEP-1998; 98US-0099741P.
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PR 10-SEP-1998; 98US-0099815P.
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PR 18-NOV-1998; 98US-0108858P.  
PR 18-NOV-1998; 98US-0108904P.  
PR 22-DEC-1998; 98US-00218517.  
PR 22-DEC-1998; 98US-0113286P.  
PR 30-DEC-1998; 98US-0114223P.  
PR 05-JAN-1999; 99WO-US000106.  
PR 12-APR-1999; 99US-00284291.  
PR 16-APR-1999; 99US-0129674P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 20-JUL-1999; 99US-0144758P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 01-SEP-1999; 99WO-US020111.  
PR 15-SEP-1999; 99WO-US021194.  
PR 29-OCT-1999; 99US-00403297.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 16-DEC-1999; 99WO-US030095.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004342.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 17-MAY-2000; 2000WO-US013705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 23-AUG-2000; 2000WO-US023328.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 08-NOV-2000; 2000WO-US030952.  
PR 10-NOV-2000; 2000WO-US030873.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 01-MAR-2001; 2001WO-US006666.

PR 01-JUN-2001; 2001US-00872035.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 14-JUN-2001; 2001US-00882636.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 04-SEP-2001; 2001US-00946374.  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S,  
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, CK,  
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,  
PI Williams PM, Wood WI;  
XX  
DR WPI; 2003-765413/72.  
XX  
XX Novel isolated PRO polypeptides useful for tissue typing, modulating  
PT biological activity of cell, as molecular weight markers in protein  
PT electrophoresis, for treating arthritis and tumors.  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21  
RESULT 2325  
ADE21476  
ID ADE21476 standard; DNA: 21 BP.  
XX  
AC ADE21476;  
XX  
DT 29-JAN-2004 (first entry)  
XX  
DE Human secreted/transmembrane protein PRO135 PCR primer #1.  
XX  
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW Immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; neuropathy; Schonlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpeticiformis; Crohn's disease; Chalassemia; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2003082628-A1.  
PF 13-DEC-2001; 2001US-00017527.  
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PR 01-SEP-1998; 98US-0098716P.  
PR 01-SEP-1998; 98US-0098723P.  
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PR 01-SEP-1998; 98US-0098750P.  
PR 02-SEP-1998; 98US-0098803P.  
PR 02-SEP-1998; 98US-0098821P.  
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PR 09-SEP-1998; 98US-0099598P.  
PR 09-SEP-1998; 98US-0099602P.  
PR 09-SEP-1998; 98US-0099642P.  
PR 10-SEP-1998; 98US-0099741P.  
PR 10-SEP-1998; 98US-0099754P.  
PR 10-SEP-1998; 98US-0099763P.  
PR 10-SEP-1998; 98US-0099792P.  
PR 10-SEP-1998; 98US-0099808P.  
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PR 03-NOV-1998; 98US-0106856P.
PR 03-NOV-1998; 98US-0106902P.
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PR 03-NOV-1998; 98US-0106919P.
PR 03-NOV-1998; 98US-0106932P.
PR 03-NOV-1998; 98US-0106934P.
PR 10-NOV-1998; 98US-0107783P.
PR 17-NOV-1998; 98US-0108775P.
PR 17-NOV-1998; 98US-0108779P.
PR 17-NOV-1998; 98US-0108787P.
PR 17-NOV-1998; 98US-0108788P.
PR 17-NOV-1998; 98US-0108801P.
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PR 17-NOV-1998; 98US-0108806P.
PR 17-NOV-1998; 98US-0108807P.
PR 17-NOV-1998; 98US-0108867P.
PR 18-NOV-1998; 98US-0108925P.
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PR 18-NOV-1998; 98US-0108849P.
PR 18-NOV-1998; 98US-0108850P.
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PR 30-DEC-1998; 98US-0114223P.
PR 05-JAN-1999; 99WO-US000106.
PR 16-APR-1999; 99US-0129674P.
PR 23-JUN-1999; 99US-0141037P.
PR 26-JUL-1999; 99US-0144758P.
PR 26-JUL-1999; 99US-0145698P.
PR 01-SEP-1999; 99WO-US020111.
PR 15-SEP-1999; 99WO-US021194.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 16-DEC-1999; 99WO-US030095.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004342.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 04-SEP-2001; 2001US-00946374.

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(GETH ) GENENTECH INC.

XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
 PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;  
 PI Williams PM, Wood WI;  
 XX WPI; 2003-900674/82.

XX New PRO nucleic acid, useful for the manufacture of a medicament for  
 PT diagnosing or treating tumor or for tissue typing.  
 XX Example 34; SEQ ID NO 105; 558pp; English.

XX The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 123 fully defined sequences as  
 CC given in the specification (including their extracellular domains either  
 CC or without their associated signal peptides. Also include are the

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
 Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGG 195  
 Db 1 CGCTGCTGCTGCTGCTGG 21

RESULT 2327  
 ADF55794  
 ID ADF55794 standard; DNA; 21 BP.

AC ADF55794;  
 XX 12-FEB-2004 (first entry)

DE Human secreted/transmembrane protein PRO1315 PCR primer #1.

XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
 KW immune response; cardiac insufficiency disorder; calcium flux;  
 KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
 KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
 KW Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;  
 KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.

OS Homo sapiens.

XX US2003204054-A1.

XX 30-OCT-2003.

PF 11-DEC-2001; 2001US-00015394.

XX 17-NOV-1998; 98US-0108787P.  
 PR 01-SEP-1999; 99WO-US020111.  
 PR 18-OCT-1999; 99US-00403297.  
 PR 18-FEB-2000; 2000WO-US004342.  
 PR 04-SEP-2001; 2001US-00946374.

(GETH ) GENENTECH INC.

XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
 PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
 PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;  
 PI Williams PM, Wood WI;  
 XX WPI; 2003-900675/82.

XX New PRO nucleic acid, useful for the manufacture of a medicament for  
 PT diagnosing or treating tumor or for tissue typing.

XX Example 34; SEQ ID NO 105; 558pp; English.

XX The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 123 fully defined sequences as  
 CC given in the specification (including their extracellular domains either  
 CC or without their associated signal peptides. Also include are the  
 CC nucleotide (NA) sequences encoding PRO, a vector comprising the PRO NA, a  
 CC host cell comprising the vector, producing PRO, a chimeric molecule  
 CC comprising PRO fused to a heterologous amino acid sequence, and an anti-  
 CC PRO antibody. PRO is useful as molecular weight markers for protein  
 CC electrophoresis and also for chromosome identification. PRO is also  
 CC useful for tissue typing. PRO and PRO NA are useful as hybridisation  
 CC probes for a CDNA library to isolate the full-length PRO cDNA. PRO NA is

CC useful for generating transgenic animals or knock-out animals which are  
CC useful in development and screening useful reagents. PRO NA is also  
CC useful in gene therapy. PRO1244, PRO1286 and PRO1303 polypeptides are  
CC useful for treating cancerous tumours. PRO1250, PRO1418 and PRO1410  
CC polypeptides are useful for suppressing immune response. PRO1246  
CC polypeptide is useful for treating cardiac insufficiency disorders.  
CC PRO1561 polypeptide is also useful for treating tumours. PRO1246 and  
CC umbilical vein endothelial cells. PRO1265, PRO1250 and PRO1474  
CC polypeptides are useful for treating bone and/or cartilage disorders  
CC (e.g., arthritis) and wound healing. PRO1130, PRO1275 and PRO1418  
CC polypeptides are useful for treating diabetes in skeletal muscle cells  
CC and obesity. PRO1265, PRO1244 and PRO1382 polypeptides are useful for  
CC treating Berger disease or other nephropathies associated with Schonlein-  
CC Henoch purpura, coeliac disease, dermatitis, herpiformis or Crohn's  
CC disease. PRO1478, PRO1265, PRO1412, PRO1279, PRO1304, PRO1306, PRO1418,  
CC PRO1410 and PRO1575 are useful in treating thalassemias. The present  
CC sequence is a PCR primer used to isolate a cDNA encoding a PRO protein of  
CC the invention.  
CC  
CC  
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
OY 175 CGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTG 21  
  
RESULT 2328  
ADH99298  
ID ADH99298 standard; DNA: 21 BP.  
AC ADH99298;  
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DT 15-APR-2004 (first entry)  
XX  
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DE Human secreted/transmembrane protein PRO1315 PCR primer #1.  
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XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpiformis; Crohn's disease; thalassemia; ss.  
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XX Homo sapiens.  
PN US2003065142-A1.  
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PD 03-APR-2003.  
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PF 11-DEC-2001; 2001US-00015499.  
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PR 17-SEP-1998; 98US-0100684P.  
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PR 17-SEP-1998; 98US-0100711P.  
PR 17-SEP-1998; 98US-0100919P.  
PR 17-SEP-1998; 98US-0100930P.  
PR 18-SEP-1998; 98US-0100848P.  
PR 18-SEP-1998; 98US-0100849P.  
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PR 23-SEP-1998; 98US-0101475P.  
PR 23-SEP-1998; 98US-0101476P.  
PR 23-SEP-1998; 98US-0101477P.  
PR 23-SEP-1998; 98US-0101479P.  
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PR 24-SEP-1998; 98US-0101741P.  
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PR 29-SEP-1998; 98US-0102330P.  
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PR 30-SEP-1998; 98US-0102484P.  
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PR	09-JUL-2001;	2001MO-US021735.
PR	04-SEP-2001;	2001US-00946374.

PI	Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
PI	Pan J, Pooni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,
PI	Williams PW, Wood WI;
XX	
DR	WPI; 2003-567191/53.
XX	
PT	Novel secreted and transmembrane polypeptide useful identifying agonists
PT	or antagonists of polypeptide, as molecular weight markers, and in tissue
XX	typing.
XX	
PS	Example 34; SEQ ID NO 105; 553bp; English.
XX	
CC	The invention relates to an isolated PRO polypeptide (secreted or
CC	transmembrane protein) having at least 80% amino acid sequence identity
CC	
Query Match	0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity	90.5%; Pred. No. 9.8e+02;
Matches 19; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
OY	175 CGTCGCTGCTGCTGCTGG 195       
Db	1 CGTCGCTGCTGCTGCTGG 21 

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XX	ADJ94067/c
XX	ID ADJ94067 standard; DNA; 21 BP.
XX	AC ADJ94067;
XX	DT 06-MAY-2004 (first entry)
XX	DE Tumour-associated antigen forward primer OX-TES-1C.
XX	KM tumour-associated antigen; cytostatic; vaccine; gene therapy; malignant;
XX	KW tumour; lymphoma; leukaemia; solid tumour; primer; ss.
XX	OS Homo sapiens.
XX	PN WO2003082916-A2.
XX	PD 09-OCT-2003.
XX	PF 27-MAR-2003; 2003WO-GB001378.
XX	PR 27-MAR-2002; 2002GB-00007251.
XX	PA (ISIS-) ISIS INNOVATION LTD.
XX	PI Banham A, Pulford K, Higgins A, Guln B;
XX	DR WPI; 2003-788339/74.
XX	PT New tumor associated antigens (e.g. OX-TES-1 to 28), and nucleic acids
XX	PT encoding them, useful for treating malignancies or tumors, e.g. lymphoma,
XX	PT leukemia or solid tumor.
XX	PS Disclosure; Page 164; 234pp; English.
CC	CC The invention relates to a novel nucleic acid molecule encoding a tumour
CC	CC associated antigen. The tumour-associated antigen having a sequence of
CC	CC 639, 110, 241, 765, 948 or 210 amino acids given in the specification, or
CC	CC its functional equivalent; or hybridizes to the tumour-associated antigen
CC	CC under high stringing conditions. The tumour-associated antigen has
CC	CC cytostatic activity. The tumour-associated antigen protein and its
CC	CC fragments can be used to create a vaccine for the treatment of disorders.
CC	CC The nucleic acid encoding the tumour-associated antigen can be used in
CC	CC gene therapy to treat disorders. The tumour associated antigens, nucleic
CC	CC acids encoding them and compositions comprising them are useful for
CC	CC treating malignancies or tumors (e.g. lymphoma, leukaemia, or solid
CC	CC tumour). The method is useful for detecting a malignant cell/tumour-
CC	CC associated antigen profile of an individual suffering from a malignancy
CC	CC or tumour, or for determining a lymphoma-associated antigen profile of an

CC individual suffering from a lymphoma. The method of identifying malignant  
CC cells is useful for screening for minimal residual disease, recurrence of  
CC malignancy or tumour after treatment, or to monitor the progress of the  
CC treatment of an individual for a malignancy or tumour. This  
CC polynucleotide sequence represents a primer used in the exemplification  
CC of the invention.  
XX  
SQ Sequence 21 BP; 8 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
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DB 21 TTGTTGAGCTGCTCTGGA 1  
  
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ADE96478  
ID ADE96478 standard; DNA; 21 BP.  
XX  
AC ADE96478;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
DE Human secreted/transmembrane protein PRO1315 PCR primer #1.  
XX  
KW Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthralgia; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpiformis; Crohn's disease; thalassemia; ss.  
XX  
OS Homo sapiens.  
XX  
PN US2003195347-A1.  
XX  
PD 16-OCT-2003.  
XX  
PF 12-DEC-2001; 2001US-00015385.  
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PR 20-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 04-SEP-2001; 2001US-00946374.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Baker KP, Botstein D, Desnovere L, Eaton DL, Ferrara N, Fong S,  
XX Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,  
XX Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,  
XX Williams PM, Wood WI;  
XX  
XX WPI; 2004-021098/02.  
XX  
XX New secreted and transmembrane PRO nucleic acid, for use in molecular  
XX biology, chromosome and gene mapping, in generating antisense RNA and  
XX DNA, in various diagnostic assays and in gene therapy.  
XX  
XX Example 34; SEQ ID NO 105; 552bp; English.  
XX  
XX The invention relates to an isolated PRO polypeptide (secreted or  
XX transmembrane protein) having at least 80% amino acid sequence identity  
XX to an amino acid sequence chosen from 123 fully defined sequences as

CC given in the specification (including their extracellular domains either  
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Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
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AC ADF25789;  
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DT 12-FEB-2004 (first entry)  
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XX  
XX Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
XX immune response; cardiac insufficiency disorder; calcium flux;  
XX umbilical vein endothelial cell; bone disorder; cartilage disorder;  
XX arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
XX Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;  
XX dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
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(GERTH ) GENENTECH INC.

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XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;
XX Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
PI Williams PM, Wood WI;
XX WPI; 2004-041394/04.

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XX Novel isolated PRO polypeptide useful for tissue typing, modulating  
PT biological activity of cell, as molecular weight markers in protein  
PT electrophoresis, for treating arthritis, tumor.

XX Example 34; SEQ ID NO 105; 552pp; English.

CC The invention relates to an isolated PRO polypeptide (secreted or  
transmembrane protein) having at least 80% amino acid sequence identity

Query Match 0.1%; Score 17.8; DB 1; Length 21;

Best Local Similarity 90.5%; Pred. No. 9.8e+02; Mismatches 19; Conservative 0; Indels 0; Gaps 0;

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KW      Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;
KW      immune response; cardiac insufficiency disorder; calcium flux;
KW      umbilical vein endothelial cell; bone disorder; cartilage disorder;
KW      arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
KW      Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;
KW      dermatitis; Herpetiformis; Crohn's disease; thalassemia; ss.
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XX (GETH ) GENENTECH INC.
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XX Baker KP, Botstein D, Desnoyers L, Baton DL, Ferrara N, Pong S;
XX Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
XX Pan J, Paoni NP, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
XX Williams PM, Wood WJ;
XX
XX WPI; 2004-041478/04.
XX
XX New isolated PRO polypeptide useful for tissue typing, modulating the
XX biological activity of a cell, as molecular weight markers in protein
XX electrophoresis, and for treating e.g. arthritis, or tumor.
XX
XX Example 34; SEQ ID NO 105; 551pp; English.
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
XX transmembrane protein) having at least 80% amino acid sequence identity
XX CC

Query Match 0.1%; Score 17.8; DB 1; Length 21;
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KW Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpiformis; Crohn's disease; thalassaemia; ss.  
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XX (GENTH ) GENENTECH INC.
XX
XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;
XX Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ,
XX Pan J, Paoletti NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,
XX Williams PM, Wood WI;
XX
XX WPI; 2004-041280/04.
XX
XX New isolated PRO polypeptides useful for treating diseases such as cancer
XX and diabetes.
XX
XX Example 34; SEQ ID NO 105; 551pp; English.
XX
XX The invention relates to an isolated PRO polypeptide (secreted or
XX transmembrane protein) having at least 80% amino acid sequence identity
XX to an amino acid sequence chosen from 123 fully defined sequences as
XX given in the specification (including their extracellular domains either
XX or without their associated signal peptides. Also include are the
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XX Best Local Similarity 90.5%; Pred. No. 9.8e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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XX
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XX immune response; cardiac insufficiency disorder; calcium flux;
XX umbilical vein endothelial cell; bone disorder; cartilage disorder;
XX arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
XX Berger disease; nephropathy; Schoulsin-Henoch purpura; coeliac disease;
XX dermatitis; neoplasms; Crohn's disease; thalassemia; ss.
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 XX  
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 XX  
 PI Baker KP, Botstein D, Desmoyers L, Eaton DL, Ferrara N, Fong S;  
 PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, CK;  
 PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK,  
 PI Williams PM, Wood WI;  
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 DR WPI; 2004-021867/02.  
 XX  
 PT Novel isolated PRO polypeptide useful for treating tumor, kidney  
 PT disorders, diabetes mellitus, thalassemia.  
 XX  
 PS Example 34; SEQ ID NO 105, 552pp; English.  
 XX  
 CC The invention relates to an isolated PRO polypeptide (secreted or  
 CC transmembrane protein) having at least 80% amino acid sequence identity  
 CC to an amino acid sequence chosen from 123 fully defined sequences as  
 CC given in the specification (including their extracellular domains either  
 CC or without their associated signal peptides. Also include are the

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
 Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
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 KW Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
 KW immune response; cardiac insufficiency disorder; calcium flux;  
 KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
 KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
 KW Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;  
 KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
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 OS Homo sapiens.  
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 PN US2003220471-A1.  
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 XX 27-NOV-2003.  
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 XX 06-DEC-2001; 2001US-00006746.  
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DB 1 CGCTGCTGCTGTCCTGG 21  
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DT 25-MAR-2004 (first entry)  
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XX  
KW Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;  
KW immune response; cardiac insufficiency disorder; calcium flux;  
KW umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KW arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KW Berger disease; nephropathy; Schönlein-Henoch purpura; coeliac disease;  
KW dermatitis; herpeticiformis; Crohn's disease; thalassemia; ss.  
XX  
OS Homo sapiens.  
XX  
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PR 08-OCT-1998; 98US-0103633P.  
PR 08-OCT-1998; 98US-0103678P.  
PR 08-OCT-1998; 98US-0103679P.  
PR 08-OCT-1998; 98US-0103711P.  
PR 14-OCT-1998; 98US-0104257P.  
PR 20-OCT-1998; 98US-0105000P.  
PR 20-OCT-1998; 98US-0105002P.  
PR 21-OCT-1998; 98US-0105104P.  
PR 22-OCT-1998; 98US-0105169P.  
PR 22-OCT-1998; 98US-0105266P.  
PR 26-OCT-1998; 98US-0105693P.  
PR 26-OCT-1998; 98US-0105694P.  
PR 27-OCT-1998; 98US-0105807P.  
PR 27-OCT-1998; 98US-0105881P.  
PR 27-OCT-1998; 98US-0105882P.  
PR 28-OCT-1998; 98US-0106023P.  
PR 28-OCT-1998; 98US-0106029P.  
PR 28-OCT-1998; 98US-0106030P.  
PR 28-OCT-1998; 98US-0106032P.  
PR 28-OCT-1998; 98US-0106033P.  
PR 28-OCT-1998; 98US-0106178P.  
PR 29-OCT-1998; 98US-0106248P.  
PR 29-OCT-1998; 98US-0106384P.  
PR 29-OCT-1998; 98US-0108500P.  
PR 30-OCT-1998; 98US-0106464P.  
PR 03-NOV-1998; 98US-0106856P.  
PR 03-NOV-1998; 98US-0106902P.  
PR 03-NOV-1998; 98US-0106905P.  
PR 03-NOV-1998; 98US-0106919P.  
PR 03-NOV-1998; 98US-0106932P.  
PR 03-NOV-1998; 98US-0106934P.  
PR 10-NOV-1998; 98US-0107783P.  
PR 17-NOV-1998; 98US-0108775P.  
PR 17-NOV-1998; 98US-0108779P.  
PR 17-NOV-1998; 98US-0108787P.  
PR 17-NOV-1998; 98US-0108788P.  
PR 17-NOV-1998; 98US-0108801P.  
PR 17-NOV-1998; 98US-0108802P.  
PR 17-NOV-1998; 98US-0108806P.  
PR 17-NOV-1998; 98US-0108807P.  
PR 17-NOV-1998; 98US-0108867P.  
PR 17-NOV-1998; 98US-0108925P.  
PR 18-NOV-1998; 98US-0108848P.  
PR 18-NOV-1998; 98US-0108850P.  
PR 18-NOV-1998; 98US-0108851P.  
PR 18-NOV-1998; 98US-0108852P.  
PR 18-NOV-1998; 98US-0108858P.  
PR 18-NOV-1998; 98US-0108904P.  
PR 22-DEC-1998; 98US-0113296P.  
PR 30-DEC-1998; 98US-0114223P.  
PR 05-JAN-1999; 99WO-US000106.

PR 16-APR-1999; 99US-0129674P.  
PR 23-JUN-1999; 99US-0141037P.  
PR 20-JUL-1999; 99US-0144758P.  
PR 26-JUL-1999; 99US-0145698P.  
PR 01-SEP-1999; 99WO-US020111.  
PR 15-SEP-1999; 99WO-US021194.  
PR 29-OCT-1999; 99US-0162506P.  
PR 30-NOV-1999; 99WO-US028313.  
PR 02-DEC-1999; 99WO-US028551.  
PR 16-DEC-1999; 99WO-US030095.  
PR 05-JAN-2000; 2000WO-US000219.  
PR 06-JAN-2000; 2000WO-US000376.  
PR 11-FEB-2000; 2000WO-US003565.  
PR 18-FEB-2000; 2000WO-US004342.  
PR 24-FEB-2000; 2000WO-US005004.  
PR 02-MAR-2000; 2000WO-US005841.  
PR 15-MAR-2000; 2000WO-US006884.  
PR 17-MAY-2000; 2000WO-US014705.  
PR 22-MAY-2000; 2000WO-US014042.  
PR 30-MAY-2000; 2000WO-US014941.  
PR 02-JUN-2000; 2000WO-US015264.  
PR 23-AUG-2000; 2000WO-US023522.  
PR 24-AUG-2000; 2000WO-US023328.  
PR 10-NOV-2000; 2000WO-US030952.  
PR 01-DEC-2000; 2000WO-US032678.  
PR 28-FEB-2001; 2001WO-US006520.  
PR 01-MAR-2001; 2001WO-US006666.  
PR 01-JUN-2001; 2001WO-US017800.  
PR 20-JUN-2001; 2001WO-US019692.  
PR 29-JUN-2001; 2001WO-US021066.  
PR 09-JUL-2001; 2001WO-US021735.  
PR 04-SEP-2001; 2001US-00946374.  
XX (GETH ) GENENTECH INC.  
XX Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;  
PI Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;  
PI Pan J, Paoi NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;  
PI Williams PM, Wood WI;  
XX WPI; 2004-108212/11.  
XX  
XX Novel isolated PRO polypeptide useful for tissue typing, modulating  
PT biological activity of cell, as molecular weight markers in protein  
PT electrophoresis, for treating arthritis, tumor.  
XX  
XX Example 34; SEQ ID NO 105; 562pp; English.  
PS  
CC The invention relates to an isolated PRO polypeptide (secreted or  
CC transmembrane protein) having at least 80% amino acid sequence identity  
CC to an amino acid sequence chosen from 123 fully defined sequences as  
CC  
Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 9.8e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21  
RESULT 2340  
ADL94624 standard; DNA; 21 BP.  
ID ADL94624;  
AC ADL94624;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX Human secreted/transmembrane protein PRO135 PCR primer #1.  
DE Human secreted/transmembrane protein PRO135 PCR primer #1.  
XX Human, PCR; primer; secreted protein; transmembrane protein; PRO; tumour;

KM immune response; cardiac insufficiency disorder; calcium flux;  
KM umbilical vein endothelial cell; bone disorder; cartilage disorder;  
KM arthritis; wound healing; diabetes; skeletal muscle cells; obesity;  
KM Berger disease; Schönlein-Henoch purpura; coeliac disease;  
KM dermatitis; herpesiformis; Crohn's disease; thalassemia; ss.

OS Homo sapiens.

PN US2004073015-A1.

PD 15-APR-2004

PF 12-DEC-2001; 2001US-00015395

PR 23-SEP-1998; 98US-0101477P

PR 01-SEP-1999; 99WO-US020111

PR 18-FEB-2000; 2000WO-US004342

XX

XX

Gao W, Goddard A, Godowski

PI Williams PM. Wood WT:

WPI: 2004-315422/29

PT New PRO polynucleotides and polypeptides, useful in promoting wound healing and in diagnosing and treating cancer, neurodegenerative diseases, stroke, hypertension or diabetes mellitus.

PS Example 34; SEQ ID NO 105; 550pp; English.  
....

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 123 fully defined sequences as given in the specification (including their extracellular domains either or without their associated signal peptides). Also include are the nucleotide (NA) sequences encoding PRO, a vector comprising the PRO NA, a host cell comprising the vector, producing PRO, a chimeric molecule comprising PRO fused to a heterologous amino acid sequence, and an anti-PRO antibody. PRO is useful as molecular weight markers for protein electrophoresis and also for chromosome identification. PRO is also useful for tissue typing. PRO and PRO NA are useful as hybridisation probes for a cDNA library to isolate the full-length PRO cDNA. PRO NA is useful for generating transgenic animals or knock-out animals which are useful in development and screening useful readouts. PRO NA is also useful in gene therapy. PRO1244, PRO1286 and PRO1303 polypeptides are useful for treating cancersous tumours. PRO1250, PRO1418 and PRO1410 polypeptides are useful for suppressing immune response. PRO1246 polypeptide is useful for treating cardiac insufficiency disorders. PRO1246 polypeptide is also useful for treating tumours. PRO1246 and PRO1561 polypeptides are useful for stimulating calcium flux in human umbilical vein endothelial cells. PRO1265, PRO1250 and PRO1474 polypeptides are useful for treating bone and/or cartilage disorders (e.g., arthritis) and wound healing. PRO1130, PRO1275 and PRO1418 polypeptides are useful for treating diabetes in skeletal muscle cells and obesity. PRO1265, PRO1244 and PRO1382 polypeptides are useful for treating Berger disease or other nephropathies associated with Schönlein Henoch purpura, collagen disease, dermatitis, herpeticiformis or Crohn's disease. PRO1478, PRO1265, PRO1412, PRO1379, PRO1304, PRO1306, PRO1418, PRO1410 and PRO1575 are useful in treating thalassemias. The present sequence is a PCR primer used to isolate a cDNA encoding a PRO protein of the invention.

Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match	0.1%;	Score 17.8;	DB 1;	Length 21;
Best Local Similarity	90.5%;	Pred. No. 9.8e+02;		
Matches 19;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0

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oy      175  CGCTGCTGCTGCTGCTGCTGG 195
          |||||
db      1    CGCTGCTGCTGCTGCTGCTGG 21

```

RESULT 2341

ID	AAA61588	standard; DNA; 23 BP
...	...	...

AC AAA61588;

DT 23-OCT-2000 (first entry)

Mouse Tespec PRO-1 RT-PCR primer PRO1-E.

KM Human Tescp PRO-3; testis specific serine protease; murine Tescp PRO-1  
 KM trypsin family serine protease; mature testis; sperm differentiation;  
 KM sperm maturation; male infertility; sterility; reproductive disorder;  
 KM contraception; reverse transcription-PCR, RT-PCR; 88.

Mus musculus

PN WO200026352-A1

PD 11-MAY-2000

PF 02-NOV-1999; 99WO-JP006111

PR 04-NOV-1998; 98JP-00313366

PA (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC

PI Senoo C, Numata M

DR WPI; 2000-365604/31

PT Trypsin family serine proteases expressed specifically in mature testis  
PT for development of methods for diagnosis and treatment of sterility and  
PT for contraception.

PS Example 9; Page 44; 121pp; Japanese

The invention relates to novel murine and human testis specific serine proteases (Tespesc PRO; AAB03156-B03160) and to cDNAs encoding them (AAA61558-661562). It also encompasses expression vectors and host cells comprising a nucleotide sequence encoding a protease of the invention, inhibitors of the proteases and antibodies against the proteases. The novel proteases are members of the trypsin family of serine proteases, having the serine and histidine active site signatures characteristic of this family. The proteases are specifically expressed in mature testis and participate in the differentiation and maturation of sperm. The proteases are potentially useful for the development of pharmaceuticals for the treatment of male infertility and other male reproductive disorders, and for the development of contraceptives. They may also be used as reagents for the diagnosis of male infertility. Sequences AAA61558-66158 represent murine Tespesc PRO-1 reverse transcription-PCR (RT-PCR) primers used in the isolation of cDNA encoding human Tespesc PRO-3 (AAA61561).

Sequence 23 BP; 4 A; 3 C; 7 G; 9 T; 0 U; 0 Other

Query Match	0.1%	Score 17.8;	DB 1;	Length 23;
Best Local Similarity	90.5%;	Pred. No.1.e+03;		
Matches 19; Conservative	0;	Mismatches 2;	Indels 0;	Gaps 0

2984 GATCCCACTCTCATTTGAGAA 3004

Db 22 GAACCCCACTCATTGAGAA 2

RESULT 2342  
ADR75562





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PT sequence and antisense sequence which has specific modifications.
XX Example 5; SEQ ID NO 999; 378bp; English.
PS
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of a disorder characterised by elevated or
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control Apob gene expression.
SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3448 TGGGGCACCCTTAAGTTGTGA 3466
Db 1 TGGGGCACCCTTAAGTTGTGA 19
RESULT 2344
ADR78194
ID ADR78194 standard; DNA; 19 BP.
XX
AC ADR78194;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2679.
XX
XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.

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PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNTY-) ALNTYAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2679; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3447 ATGGGGCACCCTTAAGTTGTG 3465
Db 1 ATGGGGCACCCTTAAGTTGTG 19
RESULT 2345
ADR79132
ID ADR79132 standard; DNA; 19 BP.
XX
XX ADR79132;
XX

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DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3617.  
 XX  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3617, 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (II); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nucleic acid sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; A; 4; 3 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 3448 TGGGCGACCTTAAGTTGTGA 3466  
 Db 1 TGGGCGACCTTAAGTTGTGA 19  
 RESULT 2346  
 ADR76426  
 ID ADR76426 standard; DNA; 19 BP.  
 XX  
 AC ADR76426;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 911.  
 DE  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 911, 378pp; English.  
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
CC can be used to control Apob gene expression.

CC Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

CC Query Match 0.1%; Score 17.4; DB 1; Length 19;

CC Best Local Similarity 94.7%; Pred. No. 9.6e+02;

CC Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CC 1966 AGTTAGTGAAGAAGCTCT 1984

CC 1 AGTTAGTGAAGAAGCTCT 19

CC Db

CC RESULT 2347

CC ADR75915

CC ADR75915 standard; DNA; 19 BP.

CC ADR75915;

CC 16-DEC-2004 (first entry)

CC Human apolipoprotein B (Apob) oligonucleotide seqid 400.

CC anti-lipemic; cardiatic; vasootropic; antiarteriosclerotic; antidiabetic;  
CC cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
CC RNA interference; iRNA; antisense technology; lipid metabolism;  
CC cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
CC coronary artery disease; CAD; coronary heart disease; CHD;  
CC atherosclerosis; hepatic glucose production;  
CC glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
CC colon cancer; lung cancer; neurological disease; Huntington disease;  
CC spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

CC Homo sapiens.

CC W02004080406-A2.

CC 23-SEP-2004.

CC 08-MAR-2004; 2004WO-US007070.

CC 07-MAR-2003; 2003US-0452682P.

CC 12-MAR-2003; 2003US-0454265P.

CC 13-MAR-2003; 2003US-0454962P.

CC 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALANYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance, the  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
XX can be used to control Apob gene expression.

XX Example 5; SEQ ID NO 400; 378bp; English.

CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
CC can be used to control Apob gene expression.

CC Sequence 19 BP; 7 A; 5 C; 1 G; 6 T; 0 U; 0 Other;

CC Query Match 0.1%; Score 17.4; DB 1; Length 19;

CC Best Local Similarity 94.7%; Pred. No. 9.6e+02;

CC Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CC 934 CTTTCCTTCAACATTA 952

CC 1 CTTTCCTTCAACATTA 19

CC Db

CC RESULT 2348

CC ADR76269

CC ADR76269 standard; DNA; 19 BP.

CC ADR76269;

CC 16-DEC-2004 (first entry)

CC Human apolipoprotein B (Apob) oligonucleotide seqid 754.

KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosarctic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 PN W02004080406-A2.  
 XX  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 754; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or deregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that

CC can be used to control Apob gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;  
 SO  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1966 AGTTAGTGAAGAAGCTCT 1984  
 Db 1 AGTTAGTGAAGAAGCTCT 19  
 RESULT 2349  
 ADR76360  
 ID ADR76360 standard; DNA, 19 BP.  
 XX  
 AC ADR76360;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 845.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosarctic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN W02004080406-A2.  
 XX  
 PN  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 845; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications

CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 943 ACAACAAATAGTATGGGAT 961  
 Db 1 ACAAGAAATAGTATGGGAT 19

RESULT 2350

ADR78523 standard; DNA; 19 BP.

XX ADR78523;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3008.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KM RNA interference; RNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452662P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0455655P.

XX 25-APR-2003; 2003US-045802P.

XX 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (AATNY-) ALNTIAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 3008; 378bp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 4 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 747 AGAGACCTGGGGGACGTGTG 765  
 Db 1 AGAGACCTGGGGGACGTGTG 19

RESULT 2351

ADR78533 standard; DNA; 19 BP.

XX ADR78533;

XX 16-DEC-2004 (first entry)

XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3018.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cyostatic; anticoagulant; nootropic; muscular; anti-HIV;  
 KM RNA interference; RNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX  
 PS Example 5; SEQ ID NO 3018; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 XX Sequence 19 BP; 7 A; 5 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 ..Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 934 CTTTCTCTACACAAATTA 952  
 Db 1 CTTTCTCTACAGAAATTA 19  
 RESULT 2352  
 ADR78978  
 ID ADR78978 standard; DNA; 19 BP.  
 XX  
 AC ADR78978;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 3463.  
 XX  
 KM antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0494597P.  
 PR 09-OCT-2003; 2003US-0506341P.  
 PR 10-OCT-2003; 2003US-0510246P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX  
 PS Example 5; SEQ ID NO 3463; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and



KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 OS Homo sapiens.  
 XX MO2004080406-A2.  
 XX 23-SEP-2004.  
 PD 08-MAR-2004; 2004MO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0462894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR

PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX

Example 5; SEQ ID NO 162; 378pp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1648 AGTCTTCATTCCTCAATG 1666  
 Db 1 AGTCTTCATTCCTGAATG 19

RESULT 2355  
 ADR78979  
 ID ADR78979 standard; DNA; 19 BP.  
 XX  
 AC ADR78979;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 3464.  
 XX

KW antilipemic; cardiac; vasotropic; antihypertensive; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX

XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 XX 13-MAR-2003; 2003US-0454962P.  
 XX 14-MAR-2003; 2003US-0455050P.  
 XX 17-APR-2003; 2003US-0462894P.  
 XX 25-APR-2003; 2003US-0463772P.  
 XX 25-APR-2003; 2003US-0465665P.  
 XX 09-MAY-2003; 2003US-0465802P.  
 XX 08-AUG-2003; 2003US-0469612P.  
 XX 11-AUG-2003; 2003US-0493986P.  
 XX 26-SEP-2003; 2003US-0506341P.  
 XX 09-OCT-2003; 2003US-0510246P.  
 XX 10-OCT-2003; 2003US-0510318P.  
 XX 07-NOV-2003; 2003US-0518453P.

PA (ALANY-) ALANYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS  
 XX Example 5; SEQ ID NO 3464; 378pp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is



CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SO Sequence 19 BP; 8 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 944 CACCATTAAGTGGGATG 962  
 DB 1 CACGATTAAGTGGGATG 19

RESULT 2356

ADRT79883  
 ID ADR79883 standard; DNA; 19 BP.

XX ADR79883;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (Apob) oligonucleotide seqid 4379.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX MO2004080406-A2.

PN 23-SEP-2004.

PF 08-MAR-2004; 2004MO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454255P.

PR 13-MAR-2003; 2003US-0454962P.

PR 13-MAR-2003; 2003US-0455050P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463722P.

PR 25-APR-2003; 2003US-0465655P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-049612P.

PR 08-AUG-2003; 2003US-0493967P.

PR 11-AUG-2003; 2003US-0506341P.

PR 26-SEP-2003; 2003US-0510246P.

PR 09-OCT-2003; 2003US-0510318P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYTAM PHARM.

XX Manoharan M, Bimcrot D;  
 PI WPI; 2004-677362/66.

PT Interference RNA agent useful for treating dyslipidaemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4379; 378bp; English.

XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SO Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3449 GGGCCACCTAAGTGGAC 3467  
 DB 1 GGGCGACCTAAGTGGAC 19

RESULT 2357

ADRT5905  
 ID ADR75905 standard; DNA; 19 BP.

XX ADR75905;

DT 16-DEC-2004 (first entry)

XX Human apolipoprotein B (Apob) oligonucleotide seqid 390.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.

PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462884P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNT-) ALNTLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 390; 378bp; English.  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemia, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 8 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 747 AGAGACTCTGGGCGACTGTG 765  
 DB 1 AGAGACTCTGGGCGACTGTG 19

RESULT 2358  
 ADR75845  
 ID ADR75845 standard; DNA; 19 BP.  
 XX  
 AC ADR75845;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 330.  
 XX  
 XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNT-) ALNTLAM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 330; 378bp; English.  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted

CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorders e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1966 AGTTAGTGAAGAGCTCT 1984  
 Db 1 AGTTAGTGAAGAGCTCT 19

RESULT 2359

ADR78180  
 ID ADR78180 standard; DNA; 19 BP.

AC ADR78180;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2665.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452662P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 11-AUG-2003; 2003US-0493986P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprising sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 2665; 378bp; English.

CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SQ Sequence 19 BP; 8 A; 1 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1965 AAGTTAGTGAAGAGCTTC 1983  
 Db 1 AAGTTAGTGAAGAGCTTC 19

RESULT 2360

ADR78154  
 ID ADR78154 standard; DNA; 19 BP.

AC ADR78154;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2639.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

XX WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 2639; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 1 C; 4 G; 4 T; 0 U; 0 Other;  
 Query March 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX  
 AC ADR79044;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3529.  
 XX  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNTY-) ALNTYIAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 3529; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart

```

CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match          0.1%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy      1966 AGTTAGTGAAGAGACTCT 1984
      |||||
Db      1 AGTTAGTGAAGAGACTTCT 19
XX
RESULT 2362
ADR76361
ID      ADR76361 standard; DNA; 19 BP.
XX
AC      ADR76361;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 846.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463722P.
PR      25-APR-2003; 2003US-0465655P.
PR      25-MAY-2003; 2003US-0465802P.
PR      09-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX
PA      (ALNTV-) ALNTVLM PHARM.
XX
PI      Manoharan M, Bumcrot D;
XX
DR      WPI; 2004-677362/66.
XX
PT      Interference RNA agent useful for treating dyslipidemias, coronary artery
PT      disease, diabetes, cancer or neurological disease, comprises sense
PT      sequence and antisense sequence which has specific modifications.

```

```

XX
XX Example 5; SEQ ID NO 846; 378bp; English.
XX
PS The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I); involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterized by elevated or
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 8 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
XX
Query Match          0.1%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy      944 CAACATTAAGTATGCGATG 962
      |||||
Db      1 CAAGATTAAGTATGCGATG 19
XX
RESULT 2363
ADR78179
ID      ADR78179 standard; DNA; 19 BP.
XX
AC      ADR78179;
XX
DT      16-DEC-2004 (first entry)
XX
DE      Human apolipoprotein B (ApoB) oligonucleotide seqid 2664.
XX
KW      antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW      cyrostatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW      RNA interference; iRNA; antisense technology; lipid metabolism;
KW      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW      coronary artery disease; CAD; coronary heart disease; CHD;
KW      atherosclerosis; hepatic glucose production;
KW      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW      colon cancer; lung cancer; neurological disease; Huntington disease;
KW      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
OS      Homo sapiens.
XX
PN      WO2004080406-A2.
XX
PD      23-SEP-2004.
XX
PF      08-MAR-2004; 2004WO-US007070.
XX
PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2664; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 9 A; 0 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1964 AAAGTGTGTAAGCAAGCT 1982  
 Db 1 AAAGTGTGTAAGCAAGCT 19  
 RESULT 2364  
 ADR78295  
 ID ADR78295 standard; DNA, 19 BP.  
 AC ADR78295;  
 XX  
 DT 16-DEC-2004 (first entry)

XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 2780.  
 XX  
 KW antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotactic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2780; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or

CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SO Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1648 AGCTTCAATCTCTGAAGT 1666

DB 1 AGCTTCAATCTCTGAAGT 19

RESULT 2365

ADR75536

ID ADR75536 standard; DNA; 19 BP.

AC ADR75536;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 21.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0462894P.

PR 17-APR-2003; 2003US-0463772P.

PR 25-APR-2003; 2003US-0465655P.

PR 25-APR-2003; 2003US-0465802P.

PR 09-MAY-2003; 2003US-0469612P.

PR 08-AUG-2003; 2003US-0493986P.

PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

PI Manoharan M, Bumcrot D;

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidemias, coronary artery

PT disease, diabetes, cancer or neurological disease, comprises sense

PT sequence and antisense sequence which has specific modifications.

XX Example 5; SEQ ID NO 21; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I); involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity, a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

SO Sequence 19 BP; 10 A; 1 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1974 AAGAGCTTCTGAAGAT 1992

DB 1 AAGAGCTTCTGAAGAT 19

RESULT 2366

ADR78655

ID ADR78655 standard; DNA; 19 BP.

AC ADR78655;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3140.

KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;

KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

KW RNA interference; iRNA; antisense technology; lipid metabolism;

KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;

KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

PN WO2004080406-A2.

XX 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

PR 12-MAR-2003; 2003US-0454265P.

PR 13-MAR-2003; 2003US-0454962P.

PR 14-APR-2003; 2003US-0455050P.

PR 17-APR-2003; 2003US-0462894P.

PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNT-) ALNTLTM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemiae, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3140; 378bp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemiae, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 7 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3770 CAGAGTCCTGAACAGAC 3788  
 Db 1 CAGAGTCCTGAACAGAC 19  
 RESULT 2367  
 ADR76939  
 ID ADR76939 standard; DNA; 19 BP.  
 XX  
 AC ADR76939;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 1424.  
 XX  
 KW antilipemic; cardiant; vasotropic; antarteriosclerotic; antidiabetic;

KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease, CAD, coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNT-) ALNTLTM PHARM.  
 PA Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemiae, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1424; 378bp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemiae, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.





PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3616; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX  
 XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 XX Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 XX  
 QY 3445 TCATGGCCACCTAAGTTG 3463  
 XX |||||  
 Db 1 TCATGGCCGACCTAAGTTG 19  
 XX  
 RESULT 2370  
 ADR75563  
 ID ADR75563 standard; DNA; 19 BP.  
 XX  
 AC ADR75563;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 XX Human apolipoprotein B (Apob) oligonucleotide seqid 48.  
 XX  
 KM antihypertic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytosolatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;

KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493866P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNTY-) ALNTYIAM PHARM.  
 XX  
 PA Manoharan M, Bumcrot D;  
 XX  
 PI WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PT  
 PS Example 5; SEQ ID NO 48; 378bp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX  
 XX Sequence 19 BP; 10 A; 1 C; 4 G; 4 T; 0 U; 0 Other;  
 XX  
 XX Query Match 0.1%; Score 17.4; DB 1; Length 19;

Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
1974 AAAAGAGCTCGAAGAAAT 1992  
1 AAAAGAGCTTCGAAAGAAAT 19

RESULT 2371  
ADR75576  
ID ADR75576 standard; DNA; 19 BP.  
XX ADR75576;  
AC ADR75576;  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 61.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 09-MAY-2003; 2003US-0465802P.  
PR 08-AUG-2003; 2003US-0459612P.  
PR 11-AUG-2003; 2003US-0459597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY-) ALNYTAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
DR WPI; 2004-677362/66.  
XX  
PT Interference RNA agent useful for treating dyslipidemia, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
PS Example 5; SEQ ID NO 61; 378pp; English.  
XX  
CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where

CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control Apob gene expression.  
XX  
SQ Sequence 19 BP; 4 A; 3 C; 7 G; 5 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 17.4; DB 1; Length 19;  
Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
1974 ATGGGCACTTCAAGTGTG 3465  
1 ATGGGCACTTCAAGTGTG 19  
Db  
RESULT 2372  
ADR76037  
ID ADR76037 standard; DNA; 19 BP.  
XX  
AC ADR76037;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 522.  
XX  
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 09-MAY-2003; 2003US-0465802P.  
PR 08-AUG-2003; 2003US-0459612P.  
PR 11-AUG-2003; 2003US-0459597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.

PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 522; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (i) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (i); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (i);  
 CC stabilising (i), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (i) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (i). (i) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol lipid imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (i) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (i) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 7 A; 7 C; 3 G; 2 T; 0 U; 0 Other:  
 SQ  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3770 CAGAGTCCCTGAACAGAC 3788  
 Db 1 CAGAGTCCCTGAACAGAC 19  
 RESULT 2373  
 ADR76513  
 ID ADR76513 standard; DNA: 19 BP.  
 XX  
 AC ADR76513;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 998.  
 XX  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-046565P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 998; 378pp; English.  
 PS  
 XX The invention describes a RNA interference (iRNA) agent (i) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (i); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (i);  
 CC stabilising (i), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (i) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (i). (i) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (i) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (i) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 CC  
 XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other:  
 SQ  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3445 TCATGGCCACCTAAGTG 3463

```

Db          1 TCATGGCGACCTAGTTG 19
|||||
RESULT 2374
ADR78463
ID  ADR78463 standard; DNA, 19 BP.
XX
XX  ADR78463;
AC
AC  16-DEC-2004 (first entry)
XX
XX
DE  Human apolipoprotein B (ApoB) oligonucleotide seqid 2948.
XX
XX  antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX  cytostatic; anticonvulsant; nootropic; muscular; anti-HIV.
XX  RNA interference; iRNA; antisense technology; lipid metabolism;
XX  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX  coronary artery disease; CAD; coronary heart disease; CHD;
XX  atherosclerosis; hepatic glucose production;
XX  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX  colon cancer; lung cancer; neurological disease; Huntington disease;
XX  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX  Homo sapiens.
OS
XX  WO2004080406-A2.
XX
XX  23-SEP-2004.
XX
XX  08-MAR-2004; 2004WO-US007070.
XX
XX
XX  07-MAR-2003; 2003US-0452682P.
XX  12-MAR-2003; 2003US-0454265P.
XX  13-MAR-2003; 2003US-0454962P.
XX  13-MAR-2003; 2003US-0455050P.
XX  14-APR-2003; 2003US-0462894P.
XX  17-APR-2003; 2003US-0463772P.
XX  25-APR-2003; 2003US-0465665P.
XX  25-APR-2003; 2003US-0465802P.
XX  09-MAY-2003; 2003US-04659612P.
XX  08-AUG-2003; 2003US-0493986P.
XX  11-AUG-2003; 2003US-0494597P.
XX  26-SEP-2003; 2003US-0506341P.
XX  09-OCT-2003; 2003US-0510246P.
XX  10-OCT-2003; 2003US-0510318P.
XX  07-NOV-2003; 2003US-0518453P.
XX
XX  (ALNY-) ALNYLAM PHARM.
XX
XX  Manoharan M, Bumcrot D;
XX
XX  WPI; 2004-677362/66.
XX
XX  Interference RNA agent useful for treating dyslipidemias, coronary artery
XX  disease, diabetes, cancer or neurological disease, comprises sense
XX  sequence and antisense sequence which has specific modifications.
XX
XX  Example 5; SEQ ID NO 2948; 378bp; English.
XX
XX  The invention describes a RNA interference (iRNA) agent (I) comprising a
XX  sense sequence and an antisense sequence, where the sense sequences have
XX  one or more asymmetrical 2'-O alkyl modifications, the antisense
XX  sequences have one or more asymmetrical phosphorothioate modifications
XX  and the antisense sequence targets a human gene sequence. Also described
XX  are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX  levels or glucose-6-phosphatase levels in a subject; producing (I);
XX  establishing (I), involves selecting a sequence with activity and
XX  introducing one or more asymmetrical modification in the sequence, where
XX  the modification decreases nuclease sensitivity while not decreasing its
XX  activity; a kit comprising (I) and instruction for its use; and a device
XX  that can be dispense or administer a composition comprising (I). (I) is
XX  useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)

```

```

CC  is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC  The subject is suffering from a disorder characterised by elevated or
CC  otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC  levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC  disorder is chosen from the HDL/LDL cholesterol imbalance,
CC  dyslipidemias, hypercholesterolaemia, statin-resistant
CC  hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC  disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC  inhibit hepatic glucose production or for treating glucose-metabolism-
CC  related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC  treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC  lung cancer), neurological disease (e.g., Huntington disease or
CC  spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC  represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC  can be used to control ApoB gene expression.
XX
XX  Sequence 19 BP; 7 A; 1 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX  Query Match          0.1%; Score 17.4; DB 1; Length 19;
XX  Best Local Similarity 94.7%; Pred. No.9.6e+02;
XX  Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Oy  1966 AGTTAGTGAAGAAGCTCT 1984
Db  1 AGTTAGTGAAGAAGCTTCT 19
|||||
RESULT 2375
ADR78181
ID  ADR78181 standard; DNA, 19 BP.
XX
XX  ADR78181;
AC
AC  16-DEC-2004 (first entry)
XX
XX
XX  Human apolipoprotein B (ApoB) oligonucleotide seqid 2666.
XX
XX  antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
XX  cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX  RNA interference; iRNA; antisense technology; lipid metabolism;
XX  cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX  coronary artery disease; CAD; coronary heart disease; CHD;
XX  atherosclerosis; hepatic glucose production;
XX  glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX  colon cancer; lung cancer; neurological disease; Huntington disease;
XX  spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX  Homo sapiens.
OS
XX  WO2004080406-A2.
XX
XX  23-SEP-2004.
XX
XX  08-MAR-2004; 2004WO-US007070.
XX
XX
XX  07-MAR-2003; 2003US-0452682P.
XX  12-MAR-2003; 2003US-0454265P.
XX  13-MAR-2003; 2003US-0454962P.
XX  13-MAR-2003; 2003US-0455050P.
XX  14-APR-2003; 2003US-0462894P.
XX  17-APR-2003; 2003US-0463772P.
XX  25-APR-2003; 2003US-0465665P.
XX  25-APR-2003; 2003US-0465802P.
XX  09-MAY-2003; 2003US-04659612P.
XX  08-AUG-2003; 2003US-0493986P.
XX  11-AUG-2003; 2003US-0494597P.
XX  26-SEP-2003; 2003US-0506341P.
XX  09-OCT-2003; 2003US-0510246P.
XX  10-OCT-2003; 2003US-0510318P.
XX  07-NOV-2003; 2003US-0518453P.
XX
XX  (ALNY-) ALNYLAM PHARM.
XX

```

PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 2666, 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 10 A; 1 C; 4 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1974 AAGAGCTCTGAAGAT 1992  
 DB 1 AAGAGCTCTGAAGAT 19  
 RESULT 2376  
 ADR79150  
 ID ADR79150 standard; DNA; 19 BP.  
 XX  
 AC ADR79150;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seq'd 3635.  
 XX  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cyrostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN MO2004080406-A2.

XX  
 PD 23-SEP-2004  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 XX  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454662P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 CC Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3635; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 9.6e+02;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3774 GTCCCTGAACAGACATGA 3792  
 DB 1 GTCCCTGAACAGACATGA 19

## RESULT 2377

AB231489

ID AB231489 standard; DNA; 20 BP.

XX AC AB231489;

XX DT 30-JAN-2003 (first entry)

XX DE Candida albicans GRACE strain PCR primer SEQ ID NO 5708.

XX KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;  
XX signal transduction; DNA replication; cell division; growth;

XX KM proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.

XX OS Candida albicans.

XX PN MO200253728-A2.

XX PD 11-JUL-2002.

XX PF 26-DEC-2001; 2001WO-US049486.

XX PR 29-DEC-2000; 2000US-0259128P.

XX PR 20-FEB-2001; 2001US-00792024.

XX PR 22-AUG-2001; 2001US-0314050P.

XX PA (ELIT-) ELITRA PHARM INC.

XX PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;

XX DR WPI; 2002-566694/60.

XX PT Constructing strains for identifying gene products as effective targets  
XX for therapeutic intervention, by inactivating in the strain one allele of  
XX a gene and placing other allele of the gene under conditional expression.

XX PS Claim 36; SEQ ID NO 5708; 167bp + Sequence Listing; English.

XX CC The invention relates to constructing (M1) a strain of diploid fungal  
XX cells in which both alleles of a gene are modified, comprising modifying  
XX one allele by insertion or replacement by a cassette having an  
XX expressible selectable marker and modifying other allele by  
XX recombination, of a promoter replacement fragment with a heterologous  
XX promoter, so that expression of the second allele is regulated by the  
XX promoter. (M1) is useful for constructing a strain of diploid fungal  
XX cells in which both alleles of a gene are modified. The diploid fungal  
XX cells having both alleles modified are useful for identifying a gene that  
XX is essential to the survival or growth of a fungus, a gene that  
XX contributes to the virulence and/or pathogenicity of a fungus, a gene  
XX that contributes to the resistance of a diploid fungus to an antifungal  
XX agent, an antifungal agent that inhibits the growth of a diploid fungus  
XX and for identifying a therapeutic agent for treatment of a mammalian  
XX disease. (M1) is useful for identifying a compound which modulates the  
XX activity of a gene product, preferably enzymatic activity, carbon  
XX compound catabolism, biosynthetic, transporter, transcriptional,  
XX translational, signal transduction, DNA replication and cell division  
XX activity. The method is useful for identifying a compound having the  
XX ability to inhibit growth or proliferation of C. albicans cells and for  
XX treating infection by C. albicans. The present sequence is that of a PCR  
XX primer used in the method of the invention. Note: The sequence data for  
XX this patent is not represented in the printed specification but is based  
XX on sequence information supplied to Derwent by the European Patent Office

XX SQ Sequence 20 BP; 0 A; 5 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 20;  
Best Local Similarity 94.7%; Pred. No. 1e+03;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

176 GCTGCTGCTGCTGCTGCTG 194

Db 1 GCTGCTGCTGCTGCTGCTG 19

## RESULT 2378

AB285595

ID AB285595 standard; DNA; 20 BP.

XX AC AB285595;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX KM lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN MO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIC-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Padalan J, Aguilar D;

XX PI Miller S, Tang L, Shahbuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
XX respiration, has oligo(s) antisense to specific gene(s) or its  
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX ubiquinone.

XX PS Claim 15; SEQ ID NO 837; 872bp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
XX immunosuppressive, and cytostatic activity. The composition may have a  
XX use in antisense gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequences

XX SQ Sequence 20 BP; 0 A; 5 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 20;  
Best Local Similarity 94.7%; Pred. No. 1e+03;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

173 TGGCGTGTGCTGCTGCTG 191

Db 2 TGTGCTGCTGCTGCTGCTG 20

RESULT 2379  
AB286076  
ID AB286076 standard; DNA; 20 BP.  
XX  
AC AB286076;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
OS Homo sapiens.  
XX  
PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 1318; 872bp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cyostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 17.4; DB 1; Length 20;  
Best Local Similarity 94.7%; Pred. No. 1e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
QY 176 GCTGCTGCTGCTGCTG 194  
|||  
DB 2 GCTGCTGCTGCTGCTG 20

RESULT 2380  
ABD21825  
ID ABD21825 standard; DNA; 20 BP.  
XX  
AC ABD21825;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE Human stemiocalcin-derived oligo SEQ ID 837.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
OS Homo sapiens.  
XX  
PN WO200285309-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
PA (EPIG-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 837; 763bp; English.  
XX  
CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cyostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to



CC prevent any unwanted effects due to it  
 XX Sequence 20 BP; 0 A; 5 C; 7 G; 8 T; 0 U; 0 Other;  
 SQ

Query Match  
 Best Local Similarity 0.1%; Score 17.4; DB 1; Length 20;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 173 TGGCTGCTGCTGCTGCTG 191  
 |||||  
 Db 2 TGTGCTGCTGCTGCTGCTG 20

RESULT 2381  
 ID ABD22306 standard; DNA; 20 BP.  
 XX  
 AC ABD22306;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Human stanniocalcin-derived oligo SEQ ID 1318.  
 XX  
 KM Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KM respiratory tract inflammation; adenose sensitivity; lung; cancer;  
 KM surfactant depletion; antiasthmatic; antiinflammatory; antiasthmatic;  
 KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KM pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 EN WO200285309-A2.  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIC-1) EPICGENESIS PHARM INC.  
 XX  
 PI Nye JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PI WPI; 2003-093058/08.  
 DR  
 XX  
 XX Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 PT  
 PS Claim 15; SEQ ID NO 1318; 763pp; English.  
 XX  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenose sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenose content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match  
 Best Local Similarity 0.1%; Score 17.4; DB 1; Length 20;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCTG 194  
 |||||  
 Db 2 GCTGCTGCTGCTGCTGCTG 20

RESULT 2382  
 ID ADK77766 standard; DNA; 20 BP.  
 XX  
 AC ADK77766;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Chimeric phosphorochiote oligonucleotide to target Nav1.3 #5100.  
 XX  
 KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;  
 KM diabetic neuropathy; arthritic pain; migraine headache;  
 KM infantile epilepsy; ataxia; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2004016754-A2.  
 PD 26-FEB-2004.  
 XX  
 PF 14-AUG-2003; 2003WO-US025465.  
 XX  
 PR 14-AUG-2002; 2002US-0403416P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 PI Roberts SL;  
 PI WPI; 2004-203785/19.  
 DR  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.  
 PT  
 PS Claim 4; SEQ ID NO 5100; 417pp; English.  
 XX  
 XX The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The  
 CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorochiote oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of  
CC human Nav1.3 expression, the oligonucleotides are designed to target  
CC different regions of the human Nav1.3 RNA.  
XX

SO Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 1e+03;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2350 CCAAGATGATTAACATGA 2368

DB 1 CCAAGATGATTAACATGA 19

RESULT 2363

ADK77012  
ID ADK77012 standard; DNA; 20 BP.

AC ADK77012;

DT 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4346.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;

KM diabetic neuropathy; arthritic pain; migraine headache;

KW infantile epilepsy; ataxia; ss.

OS Synthetic.

PN WO2004016754-A2.

PD 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025465.

XX 14-AUG-2002; 2002US-0403416P.

XX (PHAA ) PHARMACIA CORP.

PI Roberds SL;

XX WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding

PT Nav1.3, useful for useful for treating a disease or condition associated

PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure

PT disorder, or ataxia.

XX Claim 4; SEQ ID NO 4346; 417pp; English.

XX The present invention relates to an antisense compound targeted to a

CC nucleic acid molecule encoding Nav1.3, where the antisense compound

CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,

CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including

CC but not limited to neonatal or infantile epilepsy; or ataxia. The present

CC sequence represents a chimeric phosphorothioate oligonucleotide with

CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of

CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.  
XX  
XX Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 20;  
Best Local Similarity 94.7%; Pred. No. 1e+03;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2350 CCAAGATGATTAACATGA 2368

DB 2 CCAAGATGATTAACATGA 20

RESULT 2384

ADP20499/c  
ID ADP20499 standard; DNA; 20 BP.

AC ADP20499;

DT 26-AUG-2004 (first entry)

DE Transcription factor AP-2 antisense oligonucleotide seqid 46.

XX cytostatic; AP-2-inhibitor-alpha; AP-2 alpha; AP-2 alpha modulator;

KW AP-2 alpha associated disorder; hyperproliferative disorder; human;

KM transcription factor; antisense oligonucleotide; antisense technology;

XX ss.

OS Homo sapiens.

PN US2004109848-A1.

PD 10-JUN-2004.

XX 09-DEC-2002; 2002US-00315962.

XX 09-DEC-2002; 2002US-00315962.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Dean NM, Freier SM, Dobie KM;

XX WPI; 2004-440306/41.

XX New compounds targeted to nucleic acid molecules encoding AP-2 alpha and

PT inhibits the expression of AP-2 alpha, useful for treating AP-2 alpha-

PT associated disease or condition, particularly a hyperproliferative

PT disorder.  
XX Example 15; SEQ ID NO 46; 58pp; English.

XX The invention describes a compound (I) 8-80 nucleobases in length

CC targeted to a nucleic acid molecule encoding AP-2 alpha. The compound

CC specifically hybridizes with a nucleic acid molecule encoding AP-2 alpha

CC (19868 bp, SEQ ID NO: 4), and inhibits the expression of AP-2 alpha. Also

CC described are: inhibiting the expression of AP-2 alpha in cells or tissues

CC comprising contacting the cells or tissues with (I); screening for a

CC modulator of AP-2 alpha by contacting a preferred target segment of a

CC nucleic acid molecule encoding AP-2 alpha with one or more candidate

CC modulators of AP-2 alpha, and identifying one or more modulators of AP-2

CC alpha expression, which modulate the expression of AP-2 alpha; a

CC diagnostic method for identifying a disease state; and a kit or assay

CC device comprising (I). The compound is useful for treating an animal

CC having a disease or condition associated with AP-2 alpha, particularly a

CC hyperproliferative disorder. The compounds may be used for diagnostics,

CC therapeutic prophylaxis and as research reagents; or as tools in

CC differential and/or combinatorial analyses to elucidate expression

CC patterns of a portion or the entire complement of genes expressed within

CC cells and tissues. This sequence represents a human transcription factor  
XX AP-2 antisense oligonucleotide.  
XX  
XX Sequence 20 BP; 6 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 17.4; DB 1; Length 20;  
Best Local Similarity 94.7%; Pred. No. 1e+03;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194

DB 20 GCTACTGCTGCTGCTGCTG 2

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RESULT 2385
AB281769/C
ID AB281769 strand; DNA; 21 BP.
XX
XX AB281769;
AC
XX
XX 11-JUN-2003 (first entry)
DT
XX
XX Huntington's disease gene mutated exon 1 region.
DE
XX
XX Huntington's disease; noctropic; anticonvulsant; huntingtin; human;
KM gene therapy; mutant; ds.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key mutation location/Qualifiers
FH replace(10,C)
FT /*tag= a
XX
XX WO2003013437-A2.
PN
XX
XX 20-FEB-2003.
PD
XX
XX 07-AUG-2002; 2002WO-US025352.
PF
XX
XX 07-AUG-2001; 2001US-0310757P.
PR 08-AUG-2001; 2001US-0310770P.
PR 08-AUG-2001; 2001US-0310889P.
PR 04-DEC-2001; 2001US-0337212P.
XX
XX (UYDE ) UNIV DELAMARE.
PA
XX
XX Kmiec EB, Parekh-Olmedo H;
PI
XX
XX WPI; 2003-256478/25.
DR
XX
XX New single stranded oligonucleotides comprising a DNA domain having at
PT least one mismatch with respect to the genetic sequence of the
FT Huntington's disease gene to be altered, useful for treating or
XX preventing Huntington's disease.
XX
XX Example 1; Fig 6b; 133pp; English.
PS
XX
XX The present sequence is that of a portion of a mutated glutamine (CAG)
CC triplet repeat region of exon 1 of the human Huntington's disease (HD)
CC gene (see also AB281760). The triplet repeat region (see AB281767) is
CC mutated following treatment with an RNA/DNA chimeric oligonucleotide (see
CC AB281768) that causes a CAG (Gln) to TAG (stop) gene alteration in the HD
CC exon 1 repeats due to sliding of the repeat region, a phenomenon that can
CC occur with the methods of this invention. The RNA/DNA chimeric
CC oligonucleotide is an example of oligonucleotides of the invention for
CC targeted alteration of the HD gene. Such oligonucleotides can be used for
CC the treatment or prevention of HD
XX
XX
SQ Sequence 21 BP; 7 A; 6 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.1%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 176 GCTGCTGCTGCTGCTG 194
Db 19 GCTGCTGCTGCTGCTG 1

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DT 17-SEP-2003 (first entry)
XX
XX Human epithelial cadherine PCR primer 2 (from primer pair A).
DE
XX
XX Human epithelial cadherine; E cadherine; gastric carcinoma; PCR; primer;
KM ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003042409-A2.
PN
XX
XX 22-MAY-2003.
PD
XX
XX 15-NOV-2002; 2002WO-IT000729.
PF
XX
XX 16-NOV-2001; 2001IT-TO001077.
PR
XX
XX (UYUR-) UNIV URBINO.
PA
XX
XX Magnani M, Graziano F, Ruzzo A;
PI
XX
XX WPI; 2003-449579/42.
DR
XX
XX Identifying greater susceptibility to gastric carcinoma by searching for
PT polymorphisms in the promoter of the E-cadherine gene.
XX
XX Claim 11; Page 12; 17pp; English.
PS
XX
XX This invention relates to a novel method for the diagnosis of greater
CC susceptibility to gastric carcinoma, comprising searching for a possible
CC polymorphism in the promoter of the epithelial cadherine (E-cadherine)
CC gene. The method is useful for identifying a genetic polymorphism that
CC leads to a greater predisposition to the onset of gastric carcinoma. The
CC method is relatively simple, quick, accurate and reliable. The present
CC sequence is that of E-cadherine PCR primer 2 (from primer pair A) used
CC during a method to identify the genotype of an individual for a C to A
CC polymorphism at nucleotide -160 of the E-cadherine gene and claimed in
CC claim 11 of the specification
XX
XX
SQ Sequence 23 BP; 6 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.1%; Score 17.4; DB 1; Length 23;
Best Local Similarity 94.7%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 177 CTGCTGCTGCTGCTGCTG 195
Db 23 CTGCTGCTGCTGCTGCTG 5

```

```

RESULT 2386
AAL57112/C
ID AAL57112 standard; DNA; 23 BP.
XX
XX AAL57112;
AC
XX

```

```

RESULT 2387
ABT04841/C
ID ABT04841 standard; DNA; 22 BP.
XX
XX ABT04841;
AC
XX
XX 27-SEP-2002 (first entry)
DT
XX
XX C parvum P68 gene PCR primer SEQ ID NO: 84.
DE
XX
XX Cryptosporidium detection; GP900; P68; cryptopain; cryptosporidiosis;
KM PCR; primer; ss.
XX
XX Cryptosporidium parvum.
OS
XX
XX WO200194631-A1.
PN
XX
XX 13-DEC-2001.
PD
XX
XX 14-MAY-2001; 2001WO-US015624.
PF
XX
XX 06-JUN-2000; 2000US-00588995.
PR
XX

```

PA (REGC ) UNIV CALIFORNIA.  
 XX  
 PI Petersen C, Barnes DA, Nelson RG, Gut J;  
 XX WPI; 2002-566447/60.  
 DR  
 XX  
 PT Detecting Cryptosporidium in biological and environmental samples and  
 PT diagnosis of cryptosporidiosis involves, contacting the sample with  
 PT Cryptosporidium GP900, P68 or cryptopain antigen, antibody, DNA or RNA.  
 XX  
 PS Example 18; Page 144; 157pp; English.  
 XX  
 CC The present invention relates to a method of detecting Cryptosporidium in  
 CC biological and environmental samples, and of diagnosing  
 CC cryptosporidiosis. This involves obtaining a sample and contacting it  
 CC with Cryptosporidium GP900, P68 or cryptopain antigen, antibody, DNA or  
 CC RNA, or its variant, mutant or fragment. The method is also useful for  
 CC detecting and identifying individual Cryptosporidium isolates based on  
 CC the genetic characteristics, and for diagnosis of prior or concurrent  
 CC Cryptosporidium infection. The present sequence is a PCR primer for a C.  
 CC parvum coding sequence used in the exemplification of the invention  
 XX  
 SQ Sequence 22 BP; 8 A; 7 C; 0 G; 7 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 1.2e+03;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1025 TGGTGAAGTACTAGAGATG 1046  
 DB 22 TGTGTGAGTATTAGAGATG 1  
 XX  
 RESULT 2388  
 ABRK28709  
 ID ABRK28709 standard; DNA; 22 BP.  
 XX  
 AC ABRK28709;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human CDC14 PCR primer 156g7.T7R.  
 XX  
 KW Human, ss; PCR; primer; cell-cycle control; CDC14A; cancer;  
 KW prostate cancer; breast cancer; tumour; lymph node metastasis;  
 KW malignant mesothelioma; chromosome 1p21; dual specificity phosphatase;  
 KW gene therapy; protein replacement therapy.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US6331614-B1.  
 XX  
 PD 18-DEC-2001.  
 XX  
 PF 22-DEC-1999; 99US-00468872.  
 XX  
 PR 23-DEC-1998; 98US-0113833P.  
 XX  
 PA (MYRI-) MYRIAD GENETICS INC.  
 XX  
 PI Wong AKC, Teng DHF, Tavrigian SV;  
 XX WPI; 2002-129551/17.  
 DR  
 XX Nucleic acid encoding mutated form of human dual-specificity phosphatase  
 PT CDC14A polypeptide, useful to diagnose and treat cancers.  
 XX  
 PS Example 1; Col 40; 41pp; English.  
 XX  
 CC The invention relates to an isolated nucleic acid encoding a CDC14A  
 CC polypeptide (cell-cycle control protein 14A, a dual specificity  
 CC phosphatase), its complement or RNA molecule corresponding to it. Also  
 CC included are an expression vector comprising the nucleic acid and a host

CC cell transformed with the vector. The gene for CDC14A is located on human  
 CC chromosome 1p21. The nucleic acid and protein are useful to diagnose and  
 CC treat human cancers (e.g. breast cancer, prostate cancer) and tumours  
 CC (e.g. lymph node metastasis, malignant mesothelioma) which have a  
 CC mutation in the CDC14A gene, by gene therapy, protein replacement therapy  
 CC or protein mimetics. They can also be used to screen for drugs to treat  
 CC cancer. The present sequence is a PCR primer used to amplify CDC14A  
 CC sequences  
 XX  
 SQ Sequence 22 BP; 8 A; 8 C; 3 G; 3 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 1.2e+03;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1115 CCAGGACTGAAATACTAAC 1136  
 DB 1 CCAGGACTGAAATACTAC 22  
 XX  
 RESULT 2389  
 ADF50333  
 ID ADF50333 standard; DNA; 22 BP.  
 XX  
 AC ADF50333;  
 XX  
 DT 12-FEB-2004 (first entry)  
 XX  
 DE PCR primer to amplify cDNA to transform endocrine cell lines (SeqID 13).  
 XX  
 KW PCR; primer; ss; transformation; endocrine cell line;  
 KW expression cloning system; bioactive peptide; GPCR ligand.  
 XX  
 OS Unidentified.  
 XX  
 PN WO2003087366-A1.  
 XX  
 PD 23-OCT-2003.  
 XX  
 PF 16-APR-2003; 2003WO-JP004840.  
 XX  
 PR 16-APR-2002; 2002JP-00113030.  
 XX  
 PA (KYOW ) KYOWA HAKKO KOGYO KK.  
 XX  
 PI Sasaki K, Miura K, Saeki S, Yoshizawa M, Kishimoto K, Kunitomo H;  
 PI Nishi T, Obinata M;  
 XX WPI; 2003-833737/77.  
 DR  
 XX Endocrine cell lines originated from mammalian hypothalamus and  
 PT pancreatic islet, applicable in expression cloning systems of bioactive  
 PT peptide precursor genes, and in screening G protein-coupled receptor  
 PT ligands.  
 XX  
 PS Example 6; SEQ ID NO 13; 316pp; Japanese.  
 XX  
 CC This invention relates to a novel method for obtaining a DNA that encodes  
 CC a peptide acting as agonist, antagonist or inverse agonist on a target  
 CC receptor. Specifically, it comprises transformation of endocrine cell  
 CC lines originating from mammalian hypothalamus and pancreatic islets,  
 CC culturing the transformants and contacting with cells expressing the  
 CC target receptor. The identification of those cells with a response  
 CC reaction can be used for selecting a transformant cell line with the  
 CC appropriate target activity that is expressing the novel transformed DNA.  
 CC Accordingly, the present invention describes novel cell lines that are  
 CC applicable in expression cloning systems of bioactive peptide precursor  
 CC genes, and in screening GPCR ligands for use as drugs including agonists,  
 CC antagonists and inverse agonists i.e. activators and inhibitors. Such  
 CC cell lines can provide a highly sensitive and convenient GPCR ligand  
 CC assay system. This oligonucleotide sequence is a PCR primer used to  
 CC amplify cDNA to transform endocrine cell lines of the invention.

SQ Sequence 22 BP; 1 A; 7 C; 6 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 1.2e+03;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 172 CTGCGCTGCTGCTGCTGCTGCT 193  
 Db 1 CTGCTGTGCTGCTGCTACTGCT 22

RESULT 2390  
 AD080053  
 ID AD080053 standard; DNA; 22 BP.  
 AC AD080053;  
 XX  
 XX  
 DT 21-OCT-2004 (first entry)  
 XX  
 XX  
 DE Human GPCR-T4 related V2 gene specific primer #1.  
 KW Screening; agonist; antagonist; G-protein coupled receptor; GPCR;  
 KW GPCR-T4; thyroxine; isocanazole; ligand; thyroid gland function;  
 KW neutrophil; inflammatory disease; asthma;  
 KW chronic obstructive pulmonary disease; infectious disease; antiasthmatic;  
 KW antinflammatory; antimicrobial; antithyroid; ss; primer.  
 XX  
 OS Unidentified.  
 XX  
 XX WO2004063748-A1.  
 XX  
 XX 29-JUL-2004.  
 XX  
 XX 15-JAN-2004; 2004WO-JP000233.  
 XX  
 XX 15-JAN-2003; 2003JP-00007375.  
 PR  
 XX (KYOW ) KYOWA HAKKO KOGYO KK.  
 PA  
 XX Saeki S, Kawai H, Mizoguchi A, Kobatake C, Saeki K;  
 PI  
 XX WPI; 2004-571497/55.  
 DR  
 XX  
 PT Screening agonist or antagonist of G-protein coupled receptor-T4  
 PT polypeptide, by contacting GPCR-T4 with ligand e.g. thyroxine and test  
 PT substance, measuring amount of ligand binding to GPCR-T4 and comparing  
 PT result to control.  
 PS  
 PS Example 9; SEQ ID NO 22; 114bp; Japanese.  
 XX  
 XX The invention relates to a novel method for screening an agonist or  
 CC antagonist of G-protein coupled receptor (GPCR)-T4 polypeptide. The  
 CC method comprises contacting GPCR-T4, its salt, cells expressing GPCR-T4  
 CC or a membrane fraction of the cell with a ligand chosen from thyroxine,  
 CC isocanazole, a compound of formula I or II (described in the  
 CC specification), its derivative or salt, and test substance, and measuring  
 CC the amount of the ligand binding to GPCR-T4. The invention further  
 CC comprises a method for screening a substance which controls the activity  
 CC of thyroid gland function, activates or inhibits neutrophils, and  
 CC prevents or treats inflammatory diseases, asthma, chronic obstructive  
 CC pulmonary disease or infectious disease; a method for screening a  
 CC substance which controls the activity of thyroid gland function,  
 CC activates or inhibits neutrophils, and prevents or treats inflammatory  
 CC diseases, asthma, chronic obstructive pulmonary disease or infectious  
 CC disease; a kit for screening an agonist or antagonist of the GPCR-T4  
 CC polypeptide; a method for screening a substance which controls the  
 CC expression level of a gene encoding the GPCR-T4 polypeptide; an agent for  
 CC controlling thyroid gland function, activation or inhibition of  
 CC neutrophil, and prevention or treatment of inflammatory diseases, asthma,  
 CC chronic obstructive pulmonary disease or infectious diseases, and  
 CC determining the abnormality in thyroid gland function, activation or  
 CC inhibition of neutrophil, and inflammatory diseases, asthma, chronic  
 CC obstructive pulmonary disease or infectious disease. The GPCR-T4

CC polypeptide agonist or antagonist have the following activities:  
 CC antiasthmatic, antinflammatory, antimicrobial, and antithyroid. The  
 CC invention provides a novel method which is useful for screening an  
 CC agonist or antagonist of G-protein coupled receptor (GPCR)-T4  
 CC polypeptide. The invention provides a further method useful for screening  
 CC a substance which controls the activity of thyroid gland function,  
 CC activates or inhibits neutrophils, and prevents or treats inflammatory  
 CC diseases, asthma, chronic obstructive pulmonary disease or infectious  
 CC disease. This polynucleotide sequence represents a primer used in the  
 CC exemplification of the invention.  
 XX  
 XX  
 SQ Sequence 22 BP; 1 A; 7 C; 6 G; 8 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 1.2e+03;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 172 CTGCGCTGCTGCTGCTGCTGCT 193  
 Db 1 CTGCTGTGCTGCTGCTACTGCT 22

RESULT 2391  
 AAS13717  
 ID AAS13717 standard; DNA; 18 BP.  
 AC AAS13717;  
 XX  
 XX 08-MAY-2002 (first entry)  
 DT  
 XX  
 XX Simple sequence repeat, SSR, #14.  
 DE  
 XX  
 XX Simple sequence repeat; plant; ds; SSR; ryegrass; fescue; tandem repeat;  
 KW cereal profiling; grass profiling; seed batch purity testing.  
 KM  
 XX  
 OS Poaceae.  
 XX  
 XX NZS09193-A.  
 PN  
 XX 25-MAY-2001.  
 PD  
 XX 03-JAN-2001; 2001NZ-00509193.  
 PF  
 XX 24-DEC-1999; 99AU-00004906.  
 PR  
 XX 04-MAY-2000; 2000AU-00007310.  
 XX  
 XX (SAUS-) STATE SOUTH AUSTRALIA SOUTH AUSTRALIAN R.  
 PA (UYSC-) UNIV SOUTHERN CROSS.  
 PA (VICT-) STATE VICTORIA DEPT NATURAL RES & ENVIRO.  
 PA (UYAD-) INTV ADELAIDE.  
 PA (ITMA-) INT MAIZE & WHEAT IMPROVEMENT CENT.  
 PI Forster JW, Jones ES;  
 XX  
 XX WPI; 2001-512563/56.  
 DR  
 XX  
 XX New simple sequence repeats having 2 or more tandemly repeated nucleotide  
 PT core elements isolated from ryegrass and fescue, useful for selecting of  
 PT genes in grass or cereal breeding or profiling grass or cereal species  
 PT varieties.  
 PS  
 PS Claim 6; Page 51; 72pp; English.  
 XX  
 XX The invention relates to a substantially purified or isolated nucleic  
 CC acid (I) from ryegrass or fescue species including a simple sequence  
 CC repeat (SSR), having 2 or more tandemly repeated nucleotide core elements  
 CC 2-6 nucleotides in length. Also included are a nucleic acid primer  
 CC suitable for amplifying an SSR, identifying (M1) an SSR by preparing a  
 CC library of ryegrass or fescue genomic DNA enriched for SSRs and  
 CC identifying clones in the library containing SSRs, a library of ryegrass  
 CC or fescue genomic DNA enriched for SSRs prepared by the M1, selecting for  
 CC a gene in grass or cereal breeding by identifying an SSR that is closely  
 CC associated with the gene such that the SSR and the gene are

CC preferentially co-inherited, and selecting for the SSR in the breeding, a  
 CC method for DNA profiling grass or cereal species varieties by assessing  
 CC variation between SSR varieties and testing the purity of grass or cereal  
 CC seed batches by assessing variation within seed batch of an SSR. The SSRs  
 CC may be used in the selection of genes in grass or cereal breeding, for  
 CC profiling grass or cereal species varieties, for testing the purity of  
 CC grass or cereal seed batches, and for DNA profiling to establish the  
 CC distinct identity, uniformity and/or stability of a cultivar. The present  
 CC sequence is a ryegrass or fescue SSR  
 XX  
 SQ Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 9.9e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 178 TGCTGCTGCTGCTGCTG 194  
 1 TGCTGCTGCTGCTGCTG 17  
 Db  
 RESULT 2392  
 ADO26638  
 ID ADO26638 standard; DNA; 18 BP.  
 XX  
 AC ADO26638;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Synthetic leader sequence encoding DNA SEQ ID NO:31.  
 XX  
 KM phenotype; phenotypic preference; phenotype modulation; leader; ds.  
 OS  
 OS Synthetic.  
 XX  
 PN WO2004042059-A1.  
 XX  
 PD 21-MAY-2004.  
 XX  
 PF 10-NOV-2003; 2003WO-AU001487.  
 XX  
 PR 08-NOV-2002; 2002US-0425163P.  
 XX  
 PA (UYQU) UNIV QUEENSLAND.  
 XX  
 PI Frazer IH;  
 XX  
 DR WPI; 2004-411519/38.  
 DR P-PSDB; ADO26639.  
 XX  
 PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.  
 XX  
 PS Example 1; SEQ ID NO 31; 86pp; English.  
 XX  
 CC The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organism are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism or interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an

CC organism or interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected  
 CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide. The method is useful for constructing a  
 CC synthetic polynucleotide from which a polypeptide is producible to confer  
 CC a selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. It is useful for modulating the quality of a selected  
 CC phenotype displayed by an organism or part. The present sequence encodes  
 CC a synthetic leader sequence, which is used in an example from the present  
 CC invention.  
 XX  
 SQ Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 17; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 9.9e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 178 TGCTGCTGCTGCTGCTG 194  
 1 TGCTGCTGCTGCTGCTG 17  
 Db  
 RESULT 2393  
 ADO26610/c  
 ID ADO26610 standard; DNA; 18 BP.  
 XX  
 AC ADO26610;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Synthetic leader sequence encoding DNA SEQ ID NO:3.  
 XX  
 KM phenotype; phenotypic preference; phenotype modulation; leader; ds.  
 OS  
 OS Synthetic.  
 XX  
 PN WO2004042059-A1.  
 XX  
 PD 21-MAY-2004.  
 XX  
 PF 10-NOV-2003; 2003WO-AU001487.  
 XX  
 PR 08-NOV-2002; 2002US-0425163P.  
 XX  
 PA (UYQU) UNIV QUEENSLAND.  
 XX  
 PI Frazer IH;  
 XX  
 DR WPI; 2004-411519/38.  
 DR P-PSDB; ADO26611.  
 XX  
 PT Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.  
 XX  
 PS Example 1; SEQ ID NO 3; 86pp; English.  
 XX  
 CC The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the



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XX AC AA05484;
XX DT 07-OCT-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX paratrachoma; inclusion conjunctivitis; genital disease; peritphritis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX Bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
XX Chlamydia trachomatis.
XX
XX MO928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98MO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX 17-DEC-1997; 97FR-00016034.
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffiths R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1774; 1755pp; English.
XX
XX PCR primers AA201426-206209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis,
XX epididymitis, cervicitis, salpingitis, peritphritis, Bartholinitis,
XX pneumonia in breast feeding infants, and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other:
XX
XX Query Match 0.1%; Score 16.8; DB 1; Length 20;
XX Best Local Similarity 90.0%; Pred. No. 1.2e+03;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 3559 CCAACTGCTTCTCAATG 3578
XX 1 CCAACTCTTCGCCCAATG 20
XX DB
XX
XX RESULT 2396
XX ABL43316
XX ID ABL43316 standard; DNA; 20 BP.
XX
XX ABL43316;
XX
XX 11-APR-2002 (first entry)
XX
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:360.
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX

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XX PN JP2001321190-A;
XX
XX 20-NOV-2001.
XX
XX 12-MAR-2001; 2001JP-00068285.
XX
XX 10-MAR-2000; 2000JP-0006716.
XX
XX (RIKA ) RIKAGAKU KENKUSHO.
XX (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
XX
XX Arraying genome clones.
XX
XX Claim 4; Page 11; 528pp; Japanese.
XX
XX The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multiwell plates numbered for discrimination are mixed in each of the
XX multiwell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multiwell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multiwell
XX plates; (e) the clones in the multiwell plates of the specified
XX discrimination Nos. are mixed respectively in each well of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multiwell
XX plates are specified from the detected result; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention
XX
XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other:
XX
XX Query Match 0.1%; Score 16.8; DB 1; Length 20;
XX Best Local Similarity 90.0%; Pred. No. 1.2e+03;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2288 CTGGGTTAATGTCAGTTC 2307
XX 1 CCGGTTTAAAGTCAGTTC 20
XX DB
XX
XX RESULT 2397
XX ABZ22802/C
XX ID ABZ22802 standard; DNA; 20 BP.
XX
XX ABZ22802;
XX
XX 02-APR-2003 (first entry)
XX
XX Human heparanase phosphorothioate oligonucleotide SEQ ID NO:3.
XX
XX Human; heparanase; phosphorothioate; antisense oligonucleotide;
XX cytosolic; gene therapy; tumour; ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note="phosphorothioate linkages"
XX

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EN WO2003004705-A1.
XX
XX 16-JAN-2003.
XX
XX 01-JUL-2002; 2002WO-US020636.
XX
XX 05-JUL-2001; 2001US-00899440.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX Stein C;
XX
XX WPI; 2003-201558/19.
XX
XX New oligonucleotide having a sequence complementary to a sequence of
XX ribonucleic acid encoding a heparanase, useful for preparing a
XX composition for treating tumor.
XX
XX Claim 7; Page 32; 48pp; English.
XX
XX The present invention describes an oligonucleotide having a sequence
XX complementary to a sequence of ribonucleic acid encoding a heparanase.
XX The oligonucleotide hybridises with the ribonucleic acid under conditions
XX of high stringency and has a sequence comprising 10-40 bp. The
XX internucleoside linkages of the oligonucleotide comprise at least one
XX phosphorothioate linkage. Hybridisation of the oligonucleotide to the
XX ribonucleic acid inhibits expression of the heparanase, where inhibition
XX of heparanase means at least a 50% reduction in the quality of
XX heparanase. Also described: (1) a method of inhibiting expression of a
XX oligonucleotide in an amount effective to inhibit the expression of a
XX heparanase in the cell and a carrier; and (3) a method of treating a
XX tumour in a subject comprising administering to the subject an amount of
XX the above oligonucleotide effective to inhibit expression of a heparanase
XX in the subject. Heparanase antisense oligonucleotides have cytostatic
XX activity, can be used in gene therapy, and can be used for preparing a
XX composition for treating tumours. The present sequence represents a human
XX heparanase phosphorothioate antisense oligonucleotide, which is used in
XX the exemplification of the present invention
XX
XX Sequence 20 BP; 6 A; 8 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.8; DB 1; Length 20;
XX Best Local Similarity 90.0%; Pred. No. 1.2e+03;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 178 TGCTGCTGCTGCTGCTGCG 197
XX 20 TGCTGCTGCTGCTGCTGCG 1
XX
XX Db
XX
XX RESULT 2398
XX ADH18470/C
XX ID ADH18470 standard; DNA; 20 BP.
XX
XX ADH18470;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to human Apob DNA 3 - SEQ ID 459.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Homo sapiens.
XX
XX OS
XX PN WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX

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PF 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX
XX New antisense compound, useful for preparing a composition for treating
XX abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
XX 2, obesity, hyperlipidemia or cardiovascular disease.
XX
XX Claim 1; SEQ ID NO 459; 405pp; English.
XX
XX The invention relates to a novel antisense compound targeted to a nucleic
XX acid molecule encoding human apolipoprotein B (Apob) which specifically
XX hybridises with and inhibits the expression of human apolipoprotein B.
XX The compound of the invention demonstrates antiarteriosclerotic,
XX cardiant, antidiabetic and anorectic activities and may be useful for
XX preparing a composition for treating abnormal lipid or cholesterol
XX metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
XX cardiovascular disease. Furthermore, the compound has gene therapy
XX applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
XX MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
XX phosphorothioate backbone throughout and in which all cytidine residues
XX are 5-methylcytidines.
XX
XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.8; DB 1; Length 20;
XX Best Local Similarity 90.0%; Pred. No. 1.2e+03;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 318 GGGACACCAAGATTAGAGCTG 3137
XX 20 GGGACACCAAGATTAGAGATG 1
XX
XX Db
XX
XX RESULT 2399
XX ADH1831/C
XX ID ADH1831 standard; DNA; 20 BP.
XX
XX ADH1831;
XX
XX 11-MAR-2004 (first entry)
XX
XX 2'-MOE gapmer antisense oligo targeted to rabbit Apob DNA - SEQ ID 820.
XX
XX apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;
XX anorectic; lipid; cholesterol metabolism; atherosclerosis;
XX diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
XX antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
XX human; ss.
XX
XX Oryctolagus cuniculus.
XX
XX OS
XX PN WO2003097662-A1.
XX
XX 27-NOV-2003.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX 15-MAY-2002; 2002US-00147196.
XX
XX 13-NOV-2002; 2002US-0426324P.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke RM, Graham MJ;
XX
XX WPI; 2004-022840/02.
XX

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XX New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidemia or cardiovascular disease.  
 XX  
 XX Claim 1; SEQ ID NO 820; 405bp; English.  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridizes with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiatic, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 XX  
 SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16.8; DB 1; Length 20;  
 Best Local Similarity 90.0%; Pred. No. 1.2e+03;  
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 4940 TGATTACGAGTCATTGAGGT 4959  
 |||||  
 Db 20 TGATTACAGTCACTGAGGT 1  
 RESULT 2400  
 ADK73660/c  
 ID ADK73660 standard; DNA; 20 BP.  
 XX  
 AC ADK73660;  
 XX  
 DT 20-MAY-2004 (first entry)  
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #994.  
 XX  
 KM Nav1.3; Analgesic; Noctropic; Neuroprotective; post-herpetic neuralgia;  
 KM diabetic neuropathy; arthritic pain; migraine headache;  
 KM infantile epilepsy; ataxia; ss.  
 XX  
 OS Synthetic.  
 OS  
 XX  
 PN WO2004016754-A2.  
 XX  
 PD 26-FEB-2004.  
 XX  
 PF 14-AUG-2003; 2003WO-US025465.  
 XX  
 PR 14-AUG-2002; 2002US-0403416P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 PI Roberda SL;  
 XX  
 DR WPI; 2004-203785/19.  
 XX  
 PT New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.  
 XX  
 PS Claim 4; SEQ ID NO 994; 417bp; English.  
 CC The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The  
 CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to

CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target  
 CC different regions of the human Nav1.3 RNA.  
 XX  
 SQ Sequence 20 BP; 0 A; 4 C; 2 G; 14 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16.8; DB 1; Length 20;  
 Best Local Similarity 90.0%; Pred. No. 1.2e+03;  
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3467 CACAAAGAAAGAAAGAAA 3486  
 |||||  
 Db 20 CACAGAGAAAGAAAGAAA 1  
 RESULT 2401  
 ADO33417/c  
 ID ADO33417 standard; DNA; 20 BP.  
 XX  
 AC ADO33417;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE Antisense/mismatch 2'-MOE gapmer oligo targeted to human Apob SEQ ID 865.  
 XX  
 KM apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KM antilipemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;  
 KM anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KM neuroprotective; noctropic; lipid; cholesterol metabolism;  
 KM hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KM Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KM sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KM anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KM impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KM obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KM phosphorothioate backbone; human; chromosome 2p23-2p24; ss; mismatch.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 OS  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KM;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.

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XX PS Example 59; SEQ ID NO 865; 483bp; English.
XX CC
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antidiabetic, antihypertensive, antilipidemic, anorectic, cardiatic,
XX CC vasorelaxant, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hypertthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense/mismatch 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention
XX CC which is targeted to human ApoB RNA.
XX SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 3249 GGTGCGAAGCAGACTGAGGC 3268
Db 20 GGTGCGAATTAAGACTGAGGC 1
RESULT 2402
AD033443/C
ID AD033443 standard; DNA; 20 BP.
XX AC
XX AC ADO33443;
XX AC
XX AC 12-AUG-2004 (first entry)
XX DT
XX DT Antisense crab-eating macaque ApoB-targeted 2'-MOE gapmer oligo SEQ 891.
XX DE
XX DE apolipoprotein B; ApoB; cardiovascular; antidiabetic; anorectic; cardiatic;
XX KW antilipidemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hypertthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX KW phosphorothioate backbone; crab-eating macaque; ss.
XX KW
XX OS Macaca fascicularis.
XX OS
XX FH
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX PN
XX PN MO2004044181-A2.
XX PD
XX PD 27-MAY-2004.
XX XX

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PF 13-NOV-2003; 2003WO-US036411.
PR 13-NOV-2002; 2002US-0426234P.
PR 15-MAY-2003; 2003WO-US015493.
XX (ISIS-) ISIS PHARM INC.
XX PA
XX PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WP: 2004-420321/39.
XX XX
XX PS Example 61; SEQ ID NO 891; 483bp; English.
XX CC
XX CC The invention relates to a novel antisense compound where the compound
XX CC hybridises to and inhibits expression of mRNA encoding human
XX CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX CC confluent HepG2 cells in culture at a concentration of 150 nM. The
XX CC compound of the invention demonstrates cardiovascular,
XX CC antidiabetic, antihypertensive, antilipidemic, anorectic, cardiatic,
XX CC vasorelaxant, hypotensive, anabolic, eating disorder-related, cytostatic,
XX CC endocrine, vasotropic, neuroprotective and nootropic activities and may
XX CC be useful for inhibiting the expression of apolipoprotein B in cells or
XX CC tissues in vivo in order to address a condition associated with abnormal
XX CC lipid or cholesterol metabolism. The compound may be useful for
XX CC decreasing circulating lipoprotein levels, triglyceride levels,
XX CC cholesterol levels, lipid levels, fatty acid levels, acute phase
XX CC reactants and chylomicrons and thus may be utilised during treatment of
XX CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX CC syndrome, sexual ateliotic dwarfism, hypertthyroidism, hypertension,
XX CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX CC diabetes, obesity and atherosclerosis. The current sequence is that of an
XX CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX CC targeted to crab-eating macaque ApoB RNA.
XX SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 3249 GGTGCGAAGCAGACTGAGGC 3268
Db 20 GGTGTAAGCAGACTGAGGC 1
RESULT 2403
AD033449
ID AD033449 standard; DNA; 20 BP.
XX AC
XX AC ADO33449;
XX AC
XX AC 12-AUG-2004 (first entry)
XX DT
XX DT Crab-eating macaque apolipoprotein B (ApoB) antisense therapy target DNA.
XX DE
XX DE apolipoprotein B; ApoB; cardiovascular; antidiabetic; anorectic; cardiatic;
XX KW antilipidemic; antidiabetic; anorectic; cardiatic; vasotropic; hypotensive;
XX KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX KW neuroprotective; nootropic; lipid; cholesterol metabolism;
XX KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX KW sexual ateliotic dwarfism; hypertthyroidism; hypertension;
XX KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX KW obesity; atherosclerosis; crab-eating macaque; ds; antisense target.
XX KW
XX XX

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```

OS Macaca fascicularis.
XX
PN WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
PR 13-NOV-2002; 2002US-0426234P.
PR 15-MAY-2003; 2003WO-US015493.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
PT Antisense oligonucleotide compound that inhibits expression of mRNA
PT encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT syndrome.
XX
XX Example 54; Page 205; 483pp; English.
XX
PS The invention relates to a novel antisense compound where the compound
CC hybridises to and inhibits expression of mRNA encoding human
CC apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC confluent HepG2 cells in culture at a concentration of 150 nM. The
CC compound of the invention demonstrates cardiovascular,
CC antidiabetic, antilipemic, antidiabetic, anorectic, cardiant,
CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC endocrine, vasotropic, neuroprotective and neurotropic activities and may
CC be useful for inhibiting the expression of apolipoprotein B in cells or
CC tissues in vivo in order to address a condition associated with abnormal
CC lipid or cholesterol metabolism. The compound may be useful for
CC decreasing circulating lipoprotein levels, triglyceride levels,
CC cholesterol levels, lipid levels, fatty acid levels, acute phase
CC reactants and chylomicrons and thus may be utilised during treatment of
CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC diabetes, obesity and atherosclerosis. The current sequence is that of a
CC crab-eating macaque apolipoprotein B (ApoB) antisense therapy target DNA
CC of the invention.
XX
SQ Sequence 20 BP; 7 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3248 AGGTGCGAAGCAGCTGAGG 3267
Db 1 AGGTCTAAAGCAGCTGAGG 20
XX
RESULT 2404
ADO33011/c
ID ADO33011 standard; DNA; 20 BP.
XX
AC ADO33011;
XX
XX 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to human Apob RNA - SEQ 459.
XX
XX
XX apolipoprotein B, ApoB; cardiovascular; antidiabetic; hypotensive;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; neurotropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;

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XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /mod_base= a
XX /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
XX 16-20 2'-MOE wing bases, all cytidine residues are 5-
XX methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 33; SEQ ID NO 459; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antidiabetic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and neurotropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to human Apob RNA.
XX
SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3118 GGGACACGAGATTAGAGCTG 3137
Db 20 GGGACACGAGTTAGAGATG 1
XX

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RESULT 2405
AD033372/c
ID      AD033372 standard; DNA; 20 BP.
XX
AC      AD033372;
XX
DT      12-AUG-2004 (first entry)
XX
DE      Antisense 2'-MOE gapmer oligo targeted to rabbit Apob - SEQ 820.
XX
KW      apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
KW      antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW      anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW      neuroprotective; noctropic; lipid; cholesterol metabolism;
KW      hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW      Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW      sexual ateliotic dwarfism; hypertyroidism; hypertension;
KW      anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW      impotence; obstructive liver disease; Alzheimer's; diabetes;
KW      obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW      phosphorothioate backbone; rabbit; ss.
XX
OS      Oryctolagus cuniculus.
XX
FH      Key
FH      modified_base      Location/Qualifiers
FT      1..20
FT      /*tag= a
FT      /note= OTHER
FT      /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT      16-20 2'-MOE wing bases, all cytidine residues are 5-
FT      methylcytidines"
XX
PN      WO200404181-A2.
XX
PD      27-MAY-2004.
XX
PF      13-NOV-2003; 2003WO-US036411.
XX
PR      13-NOV-2002; 2002US-0426234P.
PR      15-MAY-2003; 2003WO-US015493.
XX
PA      (ISIS-) ISIS PHARM INC.
XX
PI      Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX      WPI; 2004-420321/39.
XX
PT      Antisense oligonucleotide compound that inhibits expression of mRNA
PT      encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT      diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT      syndrome.
XX
PS      Example 42; SEQ ID NO 820; 483bp; English.
XX
XX      The invention relates to a novel antisense compound where the compound
XX      hybridises to and inhibits expression of mRNA encoding human
XX      apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX      confluent HepG2 cells in culture at a concentration of 150 nM. The
XX      compound of the invention demonstrates cardiovascular,
XX      antiarteriosclerotic, antidiabetic, antidiabetic, anorectic, cardiant,
XX      vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX      endocrine, vasotropic, neuroprotective and noctropic activities and may
XX      be useful for inhibiting the expression of apolipoprotein B in cells or
XX      tissues in vivo in order to address a condition associated with abnormal
XX      lipid or cholesterol metabolism. The compound may be useful for
XX      decreasing circulating lipoprotein levels, triglyceride levels,
XX      cholesterol levels, lipid levels, fatty acid levels, acute phase
XX      reactants and chylomicrons and thus may be utilised during treatment of
XX      hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
XX      cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX      syndrome, sexual ateliotic dwarfism, hypertyroidism, hypertension,
XX      anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX      impotence, obstructive liver disease, Alzheimer's disease, dementia,

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CC      diabetes, obesity and atherosclerosis. The current sequence is that of an
CC      antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC      targeted to rabbit Apob.
XX
SQ      Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
XX
Query Match      0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.2e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
CY      4940 TGATTACGAGTCATTGAGGT 4959
DB      20 TGATTACGAGTCATTGAGGT 1
XX
RESULT 2406
AD099804
ID      AD099804 standard; DNA; 20 BP.
XX
AC      AD099804;
XX
DT      04-NOV-2004 (first entry)
XX
DE      Rice SNP primer SEQ ID NO:284.
XX
KW      breeding; plant; rice; property; characteristic; plant variety; genotype;
KW      single nucleotide polymorphism; SNP;
KW      single nucleotide polymorphism marker; SNP marker; sd-1 gene locus; IR24;
KW      Koshihikari rice; taste; stable yield; primer; ss.
XX
OS      Oryza sativa.
OS      Synthetic.
XX
PN      WO2004066719-A1.
XX
PD      12-AUG-2004.
XX
PF      20-JAN-2004; 2004WO-JP000435.
XX
PR      31-JAN-2003; 2003JP-00024143.
XX
PA      (PLAN-) PLANT GENOME CENT CO LTD.
PA      (PLAN-) PLANT FUNCTIONAL GENOMICS CO LTD.
XX
PI      Minobe Y, Wang Z, Monna R, Sakaguchi S, Yui R;
XX      WPI; 2004-593919/57.
XX
PT      Breeding of improved plant variety such as Koshihikari rice having
PT      desired property, by crossing subject plant with another desired plant,
PT      back-crossing selected genotyped hybrid plant with subject plant and
PT      repeating method.
XX
PS      Example 2; SEQ ID NO 284; 217bp; Japanese.
XX
XX      The present invention describes a method (M1) for the rapid breeding of
XX      improved plant varieties having desired properties/characteristics
XX      introduced in them. (M1) involves: (a) crossing a subject plant variety
XX      with another plant variety having the desired characteristic; (b) typing
XX      the genotype of the chromosome of the post-crossing generation in the
XX      young plant stage with the use of a single nucleotide polymorphism (SNP)
XX      marker; (c) selecting an individual to be used in the crossing in the
XX      next generation based on the typed genotype; (d) back-crossing the
XX      selected individual with the subject plant variety as described above;
XX      and (e) repeating steps (b)-(d) at least 3 times. Also described: (1) an
XX      improved plant variety produced by (M1); and (2) an improved rice breed
XX      from IR24. (M1) is useful for the rapid breeding of improved plant
XX      varieties having desired properties introduced in them. The subject plant
XX      variety is rice, more specifically Koshihikari rice. The improved plant
XX      variety produced by (M1) has favourable taste, a stable yield and better
XX      quality. The improved plant variety is not grown based on gene
XX      recombination, and so it is safe for consuming. The present sequence

```

CC represents a SNP primer, which is used in the exemplification of the  
CC present invention.

XX Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 1.2e+03;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3404 CACCTGGACATTCAGACA 3423  
DB 1 CACCTGGAAATTCAGACA 20

RESULT 2407

ID ADT01087/C  
ADT01087 standard; DNA; 20 BP.

AC ADT01087;

DT 16-DEC-2004 (first entry)

XX Novel mutant protein tyrosine kinase-related oligonucleotide SeqID1075.

XX tyrosine kinase; cancer; anti-cancer agent; signalling molecule;  
XX tumorigenesis; somatic alteration; colorectal cancer; NTRK3; FES;  
KM GUCY2F; MCKK; MLK4; kinase domain; cytosolic; tyrosine kinase inhibitor;  
KM granulate cyclase stimulator; ss.

OS Homo sapiens.

XX WO2004082458-A2.

PN 30-SEP-2004.

XX 18-FEB-2004; 2004WO-US004452.

PF 21-FEB-2003; 2003US-0448537P.

PR 29-MAY-2003; 2003US-0473895P.

XX (UYJO ) UNIV JOHNS HOPKINS.

PI Bardelli A, Parsons W, Velculescu V, Kinzler KW, Vogelstein B;

XX WPI; 2004-718702/70.

PT Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCKK) and  
XX associated methods for diagnosing cancer and screening for anti-cancer  
XX agents.

PS Disclosure; SEQ ID NO 1075; 363pp; English.

XX This invention relates to a novel activated mutant protein tyrosine  
XX kinases and associated methods for diagnosing cancer and screening for  
XX anti-cancer agents. Protein kinases are signalling molecules involved in  
XX tumorigenesis. Mutational analysis of the human tyrosine kinase gene  
XX family identified somatic alteration sin 1 in 5 colorectal cancers, with  
XX the majority of mutations occurring in the NTRK3, FES, GUCY2F and  
XX MCKK/MLK4 genes. Most were identified in the kinase domain. The invention  
XX may be useful for the production of compounds with a cytosolic activity  
XX acting as protein tyrosine kinase inhibitors or granulate cyclase  
XX stimulators. The invention may be useful for developing methods for  
XX detecting mutations involved in cancer or screening for anti-cancer  
XX agents. The present sequence is that of a human-derived oligonucleotide  
XX which is related to the invention.

XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 1.2e+03;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2934 CTCAGTGGAGCAACACATT 2953

Db, |||||  
20 CTCAGTGGTGGCAACACATT 1

RESULT 2408

AAZ73540  
ID AAZ73540 standard; DNA; 21 BP.

XX AAZ73540;

DT 10-SEP-2001 (first entry)

XX Human biallelic marker downstream amplification primer SEQ ID NO:7896.

XX Human genome; biallelic marker; high density disequilibrium map;  
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;  
XX haplotyping; hybridisation; identification; characterisation;  
XX amplification; single nucleotide polymorphism; SNP; PCR primer;  
XX diagnosis; ss.

OS Homo sapiens.

XX WO954500-A2.

PN 28-OCT-1999.

PD 21-APR-1999; 99NO-IB000822.

PF 21-APR-1998; 98US-0082614P.

PR 23-NOV-1998; 98US-0109732P.

XX (GEST ) GENSET.

XX Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

PT Novel biallelic markers used to construct a high density disequilibrium  
XX map of the human genome.  
XX Claim 8; Page 1914; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
XX invention, which contain a polymorphic base at position 24 of their  
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
XX primers for the biallelic markers. The biallelic markers of the invention  
XX have a variety of uses: they can be used for high density mapping of the  
XX human genome, and in complex association studies and haplotyping studies  
XX which are useful in determining the genetic basis for disease states.  
XX Compositions and methods of the invention can also be useful for the  
XX identification of the targets for the development of pharmaceutical  
XX agents and diagnostic methods, as well as the characterisation of the  
XX differential efficacious responses to and side effects from  
XX pharmaceutical agents acting on a disease as well as other treatment.  
XX N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
XX 3367, are not actually given a sequence in the Sequence Listing from the  
XX present invention

XX Sequence 21 BP; 8 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.8; DB 1; Length 21;  
Best Local Similarity 90.0%; Pred. No. 1.3e+03;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4572 AAAGAATCAAGATTGATGG 4591  
DB 2 ACAGAAATCAAGAGTATGG 21

RESULT 2409  
ADO22149/C  
ID ADO22149 standard; DNA; 22 BP.

XX

```

AC ADO22149;
XX
XX 12-AUG-2004 (first entry)
XX
DE Real-time PCR primer 2 used to amplify human Fzd7 (fritzzled) cDNA.
XX
XX proliferation; survival inhibition; breast cancer; Wnt; wingless; Fzd;
XX fritzzled; cytosolic; chronic lymphocytic leukemia;
XX mantle zone lymphoma; human; PCR; primer; ss; Fzd7.
XX
OS Homo sapiens.
XX
XX WO2004042028-A2.
XX
XX 21-MAY-2004.
XX
XX 03-NOV-2003; 2003WO-US035026.
XX
XX 01-NOV-2002; 2002US-00285976.
XX
XX (RSGC ) UNIV CALIFORNIA.
XX
XX Rhee C, Malini S, Wu C, Leoni LM, Corr M, Carson DA,
XX
XX WPI; 2004-400672/37.
XX
XX Inhibiting the proliferation or survival of breast cancer or leukemic
XX cells, for treating breast cancer, leukemia, by contacting the cancer
XX cells with an agent that inhibits the Wnt/Fzd signaling pathway in the
XX cancer cells.
XX
XX Claim 133; Fig 13A; 156pp; English.
XX
XX The invention relates to a novel method for inhibiting the proliferation
XX or survival of breast cancer cells that overexpress a Wnt (wingless)
XX protein in a Wnt/Fzd (fritzzled) signaling pathway when compared to non-
XX cancer cells and where the Wnt protein is selected from Wnt7b, Wnt-10b
XX and Wnt-14. The method comprises contacting the cancer cells with an
XX agent that inhibits the Wnt/Fzd signaling pathway in the cancer cells.
XX The method of the invention has cytostatic applications and may be useful
XX for treating a patient with breast cancer, chronic lymphocytic leukemia
XX or mantle zone lymphoma. The current sequence is that of a real-time PCR
XX primer of the invention which was used to amplify a human Fzd (fritzzled)
XX cDNA.
XX
XX Sequence 22 BP; 6 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.8; DB 1; Length 22;
XX Best Local Similarity 90.0%; Pred. No. 1.4e+03;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1360 TCACCTTACCTGTGTGCGCCCTG 1379
XX |||||||
XX Db 20 TCACCTTACCTGTGTGACATG 1
XX
XX RESULT 2410
XX AAT28327/c
XX AAT28327 standard; DNA; 18 BP.
XX
XX AAT28327;
XX
XX 19-NOV-1996 (first entry)
XX
XX Multi-G oligonucleotide hu SCR (G4) .
XX
XX Multi-G oligonucleotide; antisense sequence; c-myc; nuclease resistant;
XX phosphorothioate linkage; phosphorodithioate linkage; inhibitor; therapy;
XX cell proliferation; smooth muscle cell; proliferation protein;
XX vascular restenosis; arterial restenosis; ss.
XX
XX OS Synthetic.
XX
XX

```

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PN WO9611266-A2.
XX
XX 18-APR-1996.
XX
XX 03-OCT-1995; 95WO-US012770.
XX
XX 05-OCT-1994; 94US-00318458.
XX
XX (AMGE-) AMGEN INC.
XX
XX Burgess TL, Farrell CL, Fisher EF,
XX
XX WPI; 1996-209848/21.
XX
XX New modified oligo:nucleotide(s) contg. consecutive guanine residues -
XX inhibit proliferation of smooth muscle cells, esp. to prevent arterial
XX restenosis.
XX
XX Example 1; Page 44; 67pp; English.
XX
XX AAT28317-T28347 represent multi-G oligonucleotides. AAT28325-T28331 are
XX based on various permutations of human c-myc sequence. These sequences
XX are oligonucleotides of the invention. These sequences can be modified to
XX become more nuclease resistant, using phosphorothioate,
XX phosphorodithioate, or 3'-carbon modified links. To screen for modified
XX multi-G sequences that inhibit cell proliferation, cultured smooth muscle
XX cells that are arrested in the G0 phase, are induced to proliferate in
XX the presence of the multi-G sequence. The cultured smooth muscle cells
XX used in this method are attached to a solid support, and growth arrest is
XX achieved on a starvation medium, followed by transfer to a normal growth
XX medium to induce proliferation. The compounds that provide over 50%
XX inhibition at a set dosage are selected as being useful for inhibiting
XX vascular restenosis. The multi-G oligonucleotides are used to inhibit
XX proliferation of smooth muscle cells, such as to prevent arterial
XX restenosis. These sequences are not antisense sequences, but are thought
XX to work in a similar way. The sequences are thought to act by binding to
XX proteins involved in the proliferation process. Compounds containing
XX these multi-G oligonucleotides are not toxic, and their effect on cell
XX proliferation is fully reversible
XX
XX Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 103 CAGGAGCGGCCGACCGC 120
XX |||||||
XX Db 18 CAGGAGCGGCCGACGAC 1
XX
XX RESULT 2411
XX AAT28332/c
XX AAT28332 standard; DNA; 18 BP.
XX
XX AAT28332;
XX
XX 20-NOV-1996 (first entry)
XX
XX Multi-G oligonucleotide hu SCR (G4) .
XX
XX Multi-G oligonucleotide; antisense sequence; c-myc; nuclease resistant;
XX phosphorothioate linkage; phosphorodithioate linkage; inhibitor; therapy;
XX cell proliferation; smooth muscle cell; proliferation protein;
XX vascular restenosis; arterial restenosis; ss.
XX
XX OS Synthetic.
XX
XX WO9611266-A2.
XX
XX 18-APR-1996.
XX
XX 03-OCT-1995; 95WO-US012770.
XX

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XX 05-OCT-1994; 94US-00318458.
XX
XX (AMGE-) AMGEN INC.
XX
XX Burgess TL, Farrell CL, Fisher EF;
XX
XX WPI; 1996-209848/21.
XX
XX New modified oligonucleotide(s) contg. consecutive guanine residues -
XX inhibit proliferation of smooth muscle cells, esp. to prevent arterial
XX restenosis.
XX
XX Example 1; Page 46; 67pp; English.
XX
XX AAT28317-T28347 represent multi-G oligonucleotides. AAT28332-T28335 are
XX multi-G oligonucleotides with inosine substitutions. These sequences are
XX oligonucleotides of the invention. These sequences can be modified to
XX become more nuclease resistant, using phosphorothioate,
XX phosphorodithioate, or 3'-carbon modified links. To screen for modified
XX multi-G sequences that inhibit cell proliferation, cultured smooth muscle
XX cells that are arrested in the G0 phase, are induced to proliferate in
XX the presence of the multi-G sequence. The cultured smooth muscle cells
XX used in this method are attached to a solid support, and growth arrest is
XX achieved on a starvation medium, followed by transfer to a normal growth
XX medium to induce proliferation. The compounds that provide over 50%
XX inhibition at a set dosage are selected as being useful for inhibiting
XX vascular restenosis. The multi-G oligonucleotides are used to inhibit
XX proliferation of smooth muscle cells, such as to prevent arterial
XX restenosis. These sequences are not antisense sequences, but are thought
XX to work in a similar way. The sequences are thought to act by binding to
XX proteins involved in the proliferation process. Compounds containing
XX these multi-G oligonucleotides are not toxic, and their effect on cell
XX proliferation is fully reversible
XX
XX Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 103 CAGGAGCGCCGCCACGCG 120
XX |||||
XX 18 CAGGAGCGCCGCCACGCG 1
XX
XX RESULT 2412
XX AAA63144
XX ID AAA63144 standard; DNA; 18 BP.
XX
XX AAA63144;
XX
XX 07-DEC-2000 (first entry)
XX
XX Antisense oligonucleotide for use in RNase H mapping assay SEQ ID NO: 48.
XX
XX Immunoregulator; antisense oligonucleotide; cancer; tumour cell vaccine;
XX rheumatoid arthritis; autoimmune disease; diabetes mellitus; thyroiditis;
XX ss.
XX
XX Mus sp.
XX
XX WO200034467-A1.
XX
XX 15-JUN-2000.
XX
XX 24-NOV-1999; 99WO-US028096.
XX
XX 04-DEC-1998; 98US-00205995.
XX
XX (ANTI-) ANTIGEN EXPRESS INC.
XX
XX Xu M, Qiu G, Humphreys R;
XX

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XX WPI; 2000-423417/36.
XX
XX Cancer cell vaccine for treating malignancies, autoimmune disorders and
XX isolating autodecimated peptides comprises a regulator of invariant
XX chain protein expression or immunoregulatory function.
XX
XX Claim 21; Page 47; 94pp; English.
XX
XX The present sequence is an antisense oligonucleotide which was used in an
XX RNase mapping experiment. This enables the identification of sites within
XX the 11 RNA strand which hybridise to antisense DNA. These sites can then
XX be used as targets for antisense strands which may, using gene therapy,
XX be used as tumour cell vaccines (for example to treat carcinomas,
XX melanoma, leukaemia, lymphomas, stomach, breast, colon or rectum, lung,
XX prostate, bladder, pancreas, brain and ovarian cancers), or they can be
XX used to treat autoimmune diseases including rheumatoid arthritis,
XX diabetes mellitus and thyroiditis
XX
XX Sequence 18 BP; 0 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 177 CTGCTGCTGCTGCTGCTG 194
XX |||||
XX 1 CTGCTGCTGCTGCTGCTG 18
XX
XX RESULT 2413
XX AAF26668/c
XX ID AAF26668 standard; DNA; 18 BP.
XX
XX AAF26668;
XX
XX 09-SEP-2004 (revised)
XX DT 02-APR-2001 (first entry)
XX
XX Human Smad7 phosphorothioate antisense oligonucleotide SEQ ID NO:11.
XX
XX Human; Smad7; antisense oligonucleotide; phosphorothioate; inhibition;
XX anti-inflammatory; cyostatic; infection; inflammation; tumour formation;
XX ss.
XX
XX Homo sapiens.
XX OS Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1..18
XX /*tag= a
XX /mod_base
XX /note="phosphorothioate linkages"
XX
XX US6159697-A.
XX
XX 12-DEC-2000.
XX
XX 09-JAN-2000; 2000US-00487444.
XX
XX 09-JAN-2000; 2000US-00487444.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Cowseert LM;
XX
XX WPI; 2001-070108/08.
XX
XX Antisense compound capable of inhibiting the expression of human Smad7,
XX useful for preventing or delaying infection, inflammation or tumor
XX formation.
XX
XX Claim 1; Col 40; 33pp; English.
XX

```



XX The present invention describes an antisense compound (I) of up to 30  
 CC nucleobases in length capable of inhibiting the expression of human  
 CC Smad7. (I) has antiinflammatory and cytostatic, and is a modulator of  
 CC Smad7 expression. (I) can be useful for inhibiting the expression of  
 CC human Smad7 in human cells or tissues, in vitro. (I) is commonly used as  
 CC a research reagent and in diagnostics for example, to elucidate the  
 CC function of particular genes. (I) is also useful for distinguishing  
 CC between functions of various members of a biological pathway and for  
 CC prophylaxis and in kits. (I) is also useful prophylactically, e.g. to  
 CC prevent or delay infection, inflammation or tumour formation. AAF2667 to  
 CC AAF26706 represent human Smad7 antisense oligonucleotides from the  
 CC present invention  
 CC  
 CC Revised record issued on 09-SEP-2004 : Correction to feature table key  
 CC  
 CC Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 180 CTGCTGCTGCTGCTGCGC 197  
 DB 18 CTGCTGCTGCTGCTGCG 1

RESULT 2414  
 AAF99474/c  
 ID AAF99474 standard; DNA; 18 BP.  
 AC AAF99474;  
 XX  
 DT 12-JUN-2001 (first entry)  
 XX  
 DE Immunostimulatory nucleic acid #590.  
 XX  
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;  
 KW immunostimulatory; tumour; viral infection; bacterial infection;  
 KW fungal infection; parasitic infection; cancer; asthma;  
 KW infectious disease; allergy; immune deficiency; phosphothioate; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN WO200122972-A2.  
 XX  
 PD 05-APR-2001.  
 XX  
 PF 25-SEP-2000; 2000WO-US026383.  
 XX  
 PR 25-SEP-1999; 99US-0156113P.  
 PR 27-SEP-1999; 99US-0156135P.  
 PR 23-AUG-2000; 2000US-0227436P.  
 XX  
 PA (IOWA ) UNIV IOWA RES FOUND.  
 PA (COLE-) COLEY PHARM GMBH.  
 XX  
 PI Krieg AM, Schetter C, Volmer J;  
 XX  
 DR WPI; 2001-273485/28.  
 XX  
 PT Vaccinating against tumour, infectious diseases, allergies and asthma  
 PT using immunostimulatory Py-rich and TG nucleic acids.  
 XX  
 PS Claim 101; Page 50; 338pp; English.  
 XX  
 CC The present invention relates to a method for stimulating an immune  
 CC response. The method comprises administering an immunostimulatory nucleic  
 CC acid to a non-rodent subject in sufficient quantity to stimulate an  
 CC immune response. The present sequence is one such immunostimulatory  
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich  
 CC (Py-rich) or thymidine (T) rich. The method is used to vaccinate subjects

CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae  
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,  
 CC haemophilus, campylobacter, clostridium, escherichia coli and/or  
 CC streptococcus), fungal antigens and/or parasitic antigens. The method is  
 CC also useful for preventing cancer, asthma, infectious disease, allergy or  
 CC immune deficiency. The present sequence can also be used to redirect a  
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the  
 CC present sequence may have a phosphorothioate backbone  
 XX

SO Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGAGCGCCGCCACCGC 120  
 DB 18 CAGAGCGCCGCCACAGC 1

RESULT 2415  
 ABS78145/c  
 ID ABS78145 standard; DNA; 18 BP.  
 AC ABS78145;  
 XX  
 DT 13-DEC-2002 (first entry)  
 XX  
 DE Angiogenesis inhibitory oligonucleotide #629.

XX  
 KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;  
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;  
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;  
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;  
 KW rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;  
 KW plaque neovascularisation; telangiectasia; haemophilic joint;  
 KW angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;  
 KW scleroderma; hypertrophic scar.  
 XX  
 OS Synthetic.  
 XX  
 FN WO200253141-A2.  
 XX  
 PD 11-JUL-2002.  
 XX  
 PF 14-DEC-2001; 2001WO-US048458.  
 XX  
 PR 14-DEC-2000; 2000US-025534P.  
 XX  
 PA (COLE-) COLEY PHARM GROUP INC.  
 XX  
 PI Bratzler RL;  
 XX  
 DR WPI; 2002-56690/60.  
 XX  
 PT Inhibiting angiogenesis in a subject, involves administering at least one  
 PT antiangiogenic nucleic acid molecule to the subject.  
 XX  
 PS Claim 2; Page 30; 276pp; English.  
 XX  
 CC The invention relates to inhibiting angiogenesis in a subject, comprising  
 CC administering at least one antiangiogenic nucleic acid molecule. Also  
 CC included is a kit comprising a first container housing the antiangiogenic  
 CC nucleic acids, and instructions for administering them to a subject  
 CC having a condition characterised by unwanted angiogenesis. The method is  
 CC useful for inhibiting angiogenesis associated with solid tumour growth,  
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,  
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,  
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,  
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque  
 CC neovascularisation, telangiectasia, haemophilic joints, angiodiroma,  
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and  
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic

CC acid of the invention  
XX Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
SQ

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 103 CAGAGCCGCCCCACCGC 120  
DB 18 CAGAGCCGCCCCACAGC 1

RESULT 2416  
ABL38994/C  
ID ABL38994 standard; DNA; 18 BP.  
XX ABL38994;  
AC  
XX 16-APR-2002 (first entry)  
DT  
XX  
DE Immunostimulatory nucleic acid SEQ ID NO: 395.  
XX  
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;  
KM Antigenesis; metastasis; cytostatic; phosphorothioate backbone; ss.  
XX  
XX Synthetic.  
OS  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..18  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
XX  
XX WO200197843-A2.  
PN  
XX  
XX 27-DEC-2001.  
PD  
XX  
PF 22-JUN-2001; 2001WO-US020154.  
XX  
XX 22-JUN-2000; 2000US-0213346P.  
PR  
XX (IOWA ) UNIV IOWA RES FOUND.  
PA  
XX  
XX Weiner G, Hartmann G;  
PI  
XX  
XX WPI; 2002-154611/20.  
DR  
XX  
XX Treating or preventing cancer, such as basal cell carcinoma, comprises  
PT administering immunostimulatory nucleic acids that induce expression of  
PT cell surface antigens and antibodies to a subject having or at risk of  
PT developing cancer.  
XX  
XX  
XX Disclosure; Page 195; 312pp; English.  
PS  
XX The present invention relates to methods for treating or preventing  
CC cancer, involving administering to a subject having or at risk of  
CC developing cancer immunostimulatory nucleic acids that induce expression  
CC of cell surface antigens and antibodies. The methods are useful for  
CC treating or preventing cancer such as basal cell carcinoma, bladder  
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,  
CC breast cancer, cervical cancer, colon and rectum cancer, connective  
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx  
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-  
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian  
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin  
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The  
CC present sequence is an immunostimulatory oligonucleotide described in the  
CC exemplification of the invention  
XX  
SQ Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 16.4; DB 1; Length 18;  
XX Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 103 CAGAGCCGCCCCACCGC 120  
DB 18 CAGAGCCGCCCCACAGC 1

RESULT 2417  
ABA33493/C  
ID ABA33493 standard; DNA; 18 BP.  
XX ABA33493;  
AC  
XX 25-APR-2002 (first entry)  
DT  
XX  
DE GABA-B receptor 1a (gb1a) antisense oligonucleotide.  
XX  
XX Identification; gamma-amino-butyric acid; GABA; GABA-B receptor;  
KM gamma-amino-butyric acid B receptor; epilepsy; pain syndrome;  
KM antisense oligonucleotide; ss.  
XX  
XX Homo sapiens.  
OS  
XX Synthetic.  
XX  
XX WO200198779-A2.  
PN  
XX  
XX 27-DEC-2001.  
PD  
XX  
XX 19-JUN-2001; 2001WO-CA000909.  
PF  
XX  
XX 19-JUN-2000; 2000US-0212426P.  
PR  
XX 24-APR-2001; 2001US-0285969P.  
XX  
XX (MERI ) MERCK FROST CANADA & CO.  
XX  
XX NG G;  
XX  
XX WPI; 2002-062650/08.  
DR  
XX  
XX Identifying agonists of GABA(B) receptors, useful for treating epilepsy  
PT and certain pain syndromes, comprises determining that the substance is  
PT not an agonist of GABA(B) receptors with gb-1b or gb-1c subunits.  
XX  
XX  
XX Example 7; Page 79; 142pp; English.  
PS  
XX  
XX The present invention describes a method for identifying gb-1a subtype-  
CC specific agonists of the gamma-amino-butyric acid B (GABA-B) receptor,  
CC comprising determining the substance is an agonist of GABA-B receptors  
CC with a gb-1a subunit, and is not an agonist of GABA-B receptors  
CC comprising gb-1b of gb-1c subunits. The method can be used for  
CC identifying agonists of GABA-B receptors which are heteromers of gb-1a  
CC and gb2 subunits. The substances are useful for treating conditions such  
CC as epilepsy, and pain syndromes. The method identifies substances that  
CC are not agonists of GABA-A receptors, which exhibit more selectivity for  
CC effector pathways and distinct mechanisms of action compared to other  
CC compounds such as baclofen. The present sequence represents a GABA-B  
CC receptor 1a (gb1a) antisense oligonucleotide, which is used in an example  
CC from the present invention  
XX  
SQ Sequence 18 BP; 6 A; 7 C; 5 G; 0 T; 0 U; 0 Other;  
XX  
XX Query Match 0.1%; Score 16.4; DB 1; Length 18;  
XX Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 177 CTGCTGCTGCTGCTG 194  
DB 18 CTGCTGCTGCTGCTG 1

RESULT 2418  
ABL30611

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ID ABLJ0611 standard; DNA, 18 BP.
XX
XX ABLJ0611;
AC
XX
XX 21-MAR-2002 (first entry)
XX
XX Human HLA genotyping oligonucleotide SEQ ID NO 100.
DE
XX Human; human leukocyte antigen; HLA; genotype; polymorphism;
KM immunogenetic; transplantation; genetic disease; ss.
XX
OS Homo sapiens.
XX
XX WO200192572-A1.
XX
XX 06-DEC-2001.
XX
XX 01-JUN-2001; 2001WO-JP004662.
XX
XX 01-JUN-2000; 2000JP-00164798.
XX
XX (NISN ) NISSHINBO IND INC.
XX (SYST-) SYSTEM RES INC.
XX
XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
XX WPI; 2002-122074/16.
XX
XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
XX individuals e.g. by determining immunogenetic differences when
XX transplanting between them.
XX
XX Claim 10; Page 112; 345pp; Japanese.
XX
XX The invention relates to a typing kit for judging human leukocyte antigen
XX (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
XX oligonucleotides (ABLJ0512-ABLJ1809) originating in the sequences of
XX genes e.g. belonging to HLA class I antigens have been immobilised as
XX containing gene polymorphisms as alloantigens on human genome and
XX primers for amplification of cleaved nucleic acids relating to gene
XX polymorphisms. The method is useful for judging HLA genotypes of
XX individuals by determining immunogenetic differences before transplanting
XX organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
XX pancreas, Langerhans islet in pancreas and cornea, susceptibility
XX diagnosis of genetic diseases and identifying individuals
XX
XX Sequence 18 BP; 0 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 157 CGCTGCTGGCGCTGCTG 174
Db 1 CGCTGCTGGCGCTGCTG 18
RESULT 2419
ABZ81780/c
ID ABZ81780 standard; DNA, 18 BP.
XX
XX ABZ81780;
AC
XX
XX 11-JUN-2003 (first entry)
XX
XX Huntington's disease gene mutated exon 1 region.
DE
XX Huntington's disease; nootropic; anticonvulsant; huntingtin; human;
KM gene therapy; mutant; ds.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX

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XX
XX Key Location/Qualifiers
FH mutation replace(5,A)
FT /*tag= a
XX
XX WO2003013437-A2.
XX
XX 20-FEB-2003.
XX
XX 07-AUG-2002; 2002WO-US025352.
XX
XX 07-AUG-2001; 2001US-0310757P.
XX 08-AUG-2001; 2001US-0310770P.
XX 08-AUG-2001; 2001US-0310889P.
XX 04-DEC-2001; 2001US-0337219P.
XX
XX (UYDE ) UNIV DELAWARE.
XX
XX Kmlac EB, Parekh-Olmedo H;
XX
XX WPI; 2003-256478/25.
XX
XX New single stranded oligonucleotides comprising a DNA domain having at
XX least one mismatch with respect to the genetic sequence of the
XX Huntington's disease gene to be altered, useful for treating or
XX preventing Huntington's disease.
XX
XX Example 7; Fig 20; 133pp; English.
XX
XX The present sequence is that of a portion of a mutated glutamine (CAG)
XX triplet repeat region of exon 1 of the human Huntington's disease (HD)
XX gene (see also ABZ81760). The triplet repeat region is mutated following
XX treatment with single-stranded phosphorothioate-containing HD gene-
XX targeted oligonucleotide HD35/52 (see ABZ81756). The second glutamine
XX (CAG) repeat triplet is converted to CTG, creating a restriction fragment
XX length polymorphism site that enables cleavage by PvuII. HD35/25 is an
XX example of oligonucleotides of the invention for targeted alteration of
XX the HD gene. Such oligonucleotides can be used for the treatment or
XX prevention of HD
XX
XX Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 177 CTGCTGCTGCTGCTGCTG 194
Db 18 CTGCTGCTGCTGCTGCTG 1
RESULT 2420
ABZ81779/c
ID ABZ81779 standard; DNA, 18 BP.
XX
XX ABZ81779;
AC
XX
XX 11-JUN-2003 (first entry)
XX
XX Huntington's disease gene mutated exon 1 region.
DE
XX Huntington's disease; nootropic; anticonvulsant; huntingtin; human;
KM gene therapy; mutant; ds.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH mutation replace(5,A)
FT /*tag= a
XX
XX WO2003013437-A2.
XX

```

PD 20-FEB-2003.  
 XX  
 XX 07-AUG-2002; 2002MO-US025352.  
 PF  
 XX 07-AUG-2001; 2001US-0310757P.  
 PR 08-AUG-2001; 2001US-0310770P.  
 PR 08-AUG-2001; 2001US-0310889P.  
 PR 04-DEC-2001; 2001US-0337219P.  
 XX  
 XX (UYDE ) UNIV DELAMARE.  
 PA  
 PI Kmiec EB, Parekh-Olmedo H;  
 XX  
 XX WPI; 2003-256478/25.  
 DR  
 XX  
 PT New single stranded oligonucleotides comprising a DNA domain having at  
 PT least one mismatch with respect to the genetic sequence of the  
 PT Huntington's disease gene to be altered, useful for treating or  
 PT preventing Huntington's disease.  
 XX  
 XX Example 7; Fig 20; 133pp; English.  
 PS  
 XX The present sequence is that of a portion of a mutated glutamine (CAG)  
 CC triplet repeat region of exon 1 of the human Huntington's disease (HD)  
 CC gene (see also AB281760). The triplet repeat region is mutated following  
 CC treatment with single-stranded phosphorothioate-containing HD gene-  
 CC targeted oligonucleotide HD35/25 (see AB281755). The second glutamine  
 CC (CAG) repeat triplet is converted to CTG, creating a restriction fragment  
 CC length polymorphism site that enables cleavage by PvuII. HD35/25 is an  
 CC example of oligonucleotides of the invention for targeted alteration of  
 CC the HD gene. Such oligonucleotides can be used for the treatment or  
 CC prevention of HD  
 XX  
 SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 18 CTGCTGCTGCTGCTGCTG 1

RESULT 2421  
 ACD99919/C  
 ID ACD99919 standard; DNA; 18 BP.  
 XX  
 AC ACD99919;  
 XX  
 DT 25-SEP-2003 (first entry)  
 XX  
 DE Immunostimulatory nucleic acid #605.  
 XX  
 DE Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
 KM antilicer; gene therapy; vaccine; non-allergic inflammatory disease;  
 KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
 KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US2003050268-A1.  
 PD  
 PD 13-MAR-2003.  
 XX  
 PF 29-MAR-2002; 2002US-00112653.  
 XX  
 PR 29-MAR-2001; 2001US-0219642P.  
 XX  
 PA (KRIE/) KRIEG A M.  
 PA (BERG/) BERG D J.  
 XX  
 PI Krieg AM, Berg DJ;

XX  
 DR WPI; 2003-521815/49.  
 XX  
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,  
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel  
 PT disease by administering an immunostimulatory nucleic acid.  
 XX  
 XX Disclosure; Page 25; 229pp; English.  
 XX  
 CC The invention describes a method of treating non-allergic inflammatory  
 CC disease comprising administering to a subject having or at risk of  
 CC developing a non-allergic inflammatory disease an immunostimulatory  
 CC nucleic acid for prevention or treatment of the disease. The method is  
 CC useful for treating non-allergic inflammatory diseases, such as  
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or  
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.  
 CC This sequence represents an immunostimulatory nucleic acid  
 XX  
 SQ Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 103 CAGAGCCGCCGCCACCGC 120  
 Db 18 CAGAGCCGCCGCCACCGC 1

RESULT 2422  
 ADB36976/C  
 ID ADB36976 standard; DNA; 18 BP.  
 XX  
 AC ADB36976;  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Immunostimulatory nucleic acid #590.  
 XX  
 DE Immunostimulatory nucleic acid #590.

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 18 CTGCTGCTGCTGCTGCTG 1

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 18 CTGCTGCTGCTGCTGCTG 1

RESULT 2422  
 ADB36976/C  
 ID ADB36976 standard; DNA; 18 BP.  
 XX  
 AC ADB36976;  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Immunostimulatory nucleic acid #590.  
 XX  
 DE Immunostimulatory nucleic acid #590.

Qy 177 CTGCTGCTGCTGCTGCTG 194  
 Db 18 CTGCTGCTGCTGCTGCTG 1

RESULT 2421  
 ACD99919/C  
 ID ACD99919 standard; DNA; 18 BP.  
 XX  
 AC ACD99919;  
 XX  
 DT 25-SEP-2003 (first entry)  
 XX  
 DE Immunostimulatory nucleic acid #605.  
 XX  
 DE Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;  
 KM antilicer; gene therapy; vaccine; non-allergic inflammatory disease;  
 KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;  
 KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN US2003087848-A1.  
 PD  
 PD 08-MAY-2003.  
 XX  
 PF 02-FEB-2001; 2001US-00776479.  
 XX  
 PR 03-FEB-2000; 2000US-0179991P.  
 XX  
 PA (BRAT/) BRATZLER R L.  
 PA (PETE/) PETERSEN D M.  
 PA (FOUR/) FOURON Y.  
 XX  
 PI Bratzler RL, Petersen DM, Fouron Y;  
 XX  
 XX WPI; 2003-657977/62.  
 DR  
 PT Treating and/or preventing allergy or asthma using an immunostimulatory  
 PT nucleic acid alone or in combination with an asthma/allergy medicament.  
 XX  
 PS Disclosure; Page 14; 221pp; English.  
 XX  
 CC The invention relates to a method of treating or preventing allergy or  
 CC asthma which comprises administering to a subject a poly-G nucleic acid  
 CC in an aerosol formulation. The methods and compositions of the present  
 CC invention are useful for diagnosing and/or treating asthma and allergy  
 CC especially in a hypo-responsive subject. The present sequence represents  
 CC an immunostimulatory nucleic acid of the invention.  
 XX  
 SQ Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
 |||||  
 DB 18 CAGGAGCCGCCACACAGC 1

RESULT 2423  
 ACA63218/c  
 ID ACA63218 standard; DNA; 18 BP.

ACA63218;  
 DT 06-MAY-2004 (first entry)  
 XX  
 XX  
 DE Toll-like receptor 9 inhibitory nucleic acid #2.  
 XX  
 XX  
 KW Autoimmune disease; inflammatory disease; inhibitory oligonucleotide;  
 KW immunostimulatory; antineumatic; antiarthritic; dermatological;  
 KW immunosuppressive; antiinflammatory; nephrotropic; antidiabetic;  
 KW antiviral; hepatotropic; cytostatic; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN WO2003103586-A2.  
 XX  
 PD 18-DEC-2003.  
 XX  
 XX 05-JUN-2003; 2003WO-US017733.  
 PF  
 PR 05-JUN-2002; 2002US-0386274P.  
 XX  
 XX (COLE-) COLEY PHARM GROUP INC.  
 PA  
 XX  
 PI Krieg AM;  
 DR WPI; 2004-090671/09.  
 XX  
 PT Treating autoimmune disease by administering to subject having or at risk  
 PT of developing autoimmune disease, inhibitory nucleic acid and small  
 PT molecule antagonist of immunostimulatory CpG nucleic acids.  
 XX  
 PS Claim 9; Page 55; Opp; English.

CC The present invention relates to a method of treating an autoimmune  
 CC disease, which involves administering to a subject having or at risk of  
 CC developing an autoimmune disease an inhibitory nucleic acid and a small  
 CC molecule antagonist of immunostimulatory CpG nucleic acids, in an  
 CC effective amount to treat or prevent the autoimmune disease. The method  
 CC is useful for prophylaxis and treatment of autoimmune diseases, e.g.  
 CC rheumatoid arthritis, systemic lupus erythematosus (SLE), inflammatory  
 CC bowel disease, multiple sclerosis (MS), glomerulonephritis, type 1  
 CC diabetes mellitus, Sjogren's syndrome, viral infections associated with  
 CC hepatitis B virus (HBV) and hepatitis C virus (HCV), graft-versus-host  
 CC disease (GVHD), paraneoplastic autoimmune syndrome associated with small  
 CC cell lung cancer, and breast cancer. The present sequence is an  
 CC inhibitory nucleic acid shown in the exemplification of the invention

XX  
 SQ Sequence 18 BP; 0 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
 |||||  
 DB 18 CAGGAGCCGCCACACAGC 1

RESULT 2424

ADN97298/c  
 ID ADN97298 standard; DNA; 18 BP.  
 XX  
 XX ADN97298;  
 AC  
 XX  
 DT 01-JUL-2004 (first entry)  
 XX  
 XX  
 DE Primer of the invention #88.  
 XX  
 XX DNA fingerprinting; Cannabis sativa; short tandem repeat marker;  
 KW forensic identification; marijuana; primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2004008841-A2.  
 XX  
 PD 29-JAN-2004.  
 XX  
 XX 21-JUL-2003; 2003WO-US022887.  
 PF  
 PR 19-JUL-2002; 2002US-0397179P.  
 XX  
 XX (UYAR-) UNIV ARIZONA.  
 PA (KEIM/) KEIM P S.  
 PA (ZINN/) ZINNAMON K.  
 XX  
 PI Keim PS, Zinnamon K;  
 XX  
 DR WPI; 2004-143139/14.  
 XX  
 XX New isolated nucleic acid for amplification of a short tandem repeat  
 PT located in DNA isolated from Cannabis sativa L species, useful for  
 PT forensic identification of marijuana or for linking a marijuana sample to  
 PT its plant source.  
 XX  
 PS Disclosure, SEQ ID NO 165; 79pp; English.  
 XX  
 CC The present invention relates to DNA fingerprinting for Cannabis sativa  
 CC using short tandem repeat markers. The nucleic acid is useful for  
 CC forensic identification of marijuana or for linking a marijuana sample to  
 CC its plant source. The present sequence represents a primer of the  
 CC invention.

XX  
 SQ Sequence 18 BP; 6 A; 7 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCT 193  
 |||||  
 DB 18 GCTGCTGCTGCTGCT 1

RESULT 2425  
 ADS16441  
 ID ADS16441 standard; DNA; 18 BP.  
 XX  
 XX ADS16441;  
 AC  
 XX  
 DT 02-DEC-2004 (first entry)  
 XX  
 XX Allele A oligo #4, used in polynucleotide sequence detection.  
 DS Single nucleotide polymorphism; SNP; genotyping; ss.  
 KW  
 XX  
 OS Synthetic.  
 XX  
 PN US2004175704-A1.  
 XX  
 PD 09-SEP-2004.  
 XX  
 PF 12-MAY-2003; 2003US-00436231.

XX 06-MAR-2003; 2003US-0452481P.  
XX (STRA-) STRATAGENE.  
XX Sorge JA, Firmin A;  
XX WPI; 2004-642120/62.  
XX  
XX Determining polynucleotide sequence differences by amplifying  
PT polynucleotide in presence of labeled nucleotide and detecting variation  
PT based on incorporation frequency of labeled nucleotide compared to known  
PT reference frequency.  
XX  
XX Disclosure; SEQ ID NO 6; 52pp; English.  
XX  
XX The invention relates to compositions, kits and methods for detecting  
CC polynucleotide sequence differences. The method involves amplifying the  
CC polynucleotide of interest in the presence of a labelled nucleotide and  
CC detecting variation based on incorporation frequency of labelled  
CC nucleotide compared to known reference frequency. The method is useful  
CC for determining a sequence difference such as a single nucleotide  
CC polymorphism (SNP) or a tandem repeat, between a region of interest in a  
CC polynucleotide and a reference sequence. It is useful for determining the  
CC presence of a mutation in a region of interest in a polynucleotide and is  
CC also useful for genotyping. The present sequence is an allelic  
CC oligonucleotide used in polynucleotide sequence detection.  
XX  
SQ Sequence 18 BP; 0 A; 5 C; 8 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
OY 174 GCGCTGCTGCTGCTGCTG 191  
Db 1 GGGCTGCTGCTGCTGCTG 18  
  
RESULT 2426  
ADSI6440/c  
ID ADSI6440 standard; DNA; 18 BP.  
XX  
AC ADSI6440;  
XX  
XX 02-DEC-2004 (first entry)  
XX  
XX Allele A oligo #3, used in polynucleotide sequence detection.  
XX  
XX Single nucleotide polymorphism; SNP; genotyping; ss.  
XX  
XX Synthetic.  
XX  
XX US2004175704-A1.  
XX  
XX 09-SEP-2004.  
XX  
XX 12-MAY-2003; 2003US-00436231.  
XX  
XX 06-MAR-2003; 2003US-0452481P.  
XX  
XX (STRA-) STRATAGENE.  
XX  
XX Sorge JA, Firmin A;  
XX  
XX WPI; 2004-642120/62.  
XX  
XX Determining polynucleotide sequence differences by amplifying  
PT polynucleotide in presence of labeled nucleotide and detecting variation  
PT based on incorporation frequency of labeled nucleotide compared to known  
PT reference frequency.  
XX  
PS Disclosure; SEQ ID NO 5; 52pp; English.

XX  
XX The invention relates to compositions, kits and methods for detecting  
CC polynucleotide sequence differences. The method involves amplifying the  
CC polynucleotide of interest in the presence of a labelled nucleotide and  
CC detecting variation based on incorporation frequency of labelled  
CC nucleotide compared to known reference frequency. The method is useful  
CC for determining a sequence difference such as a single nucleotide  
CC polymorphism (SNP) or a tandem repeat, between a region of interest in a  
CC polynucleotide and a reference sequence. It is useful for determining the  
CC presence of a mutation in a region of interest in a polynucleotide and is  
CC also useful for genotyping. The present sequence is an allelic  
CC oligonucleotide used in polynucleotide sequence detection.  
XX  
SQ Sequence 18 BP; 5 A; 8 C; 5 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
OY 174 GCGCTGCTGCTGCTGCTG 191  
Db 18 GGGCTGCTGCTGCTGCTG 1  
  
RESULT 2427  
AAL62789/c  
ID AAL62789 standard; DNA; 18 BP.  
XX  
AC AAL62789;  
XX  
XX 06-OCT-2003 (first entry)  
XX  
XX Human ER-beta antisense oligonucleotide, AS1.  
XX  
XX Antisense; vascular oestrogen receptor; ER-alpha; ER-beta; angiogenesis;  
XX atherosclerotic plaque; chemotactic assay; vascular healing; human;  
XX mitogenic assay; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003056010-A2.  
XX  
XX 10-JUL-2003.  
XX  
XX 20-DEC-2002; 2002WO-CN002000.  
XX  
XX 21-DEC-2001; 2001CA-02365811.  
XX  
XX (CARD-) INST CARDIOLOGIE MONTREAL.  
XX  
XX Tanguay J, Strole M;  
XX  
XX WPI; 2003-559277/52.  
XX  
XX New antisense oligonucleotide, complementary to a gene encoding a  
PT mammalian vascular estrogen receptor (ER) comprising ER-alpha and ER-  
PT beta, useful for preparing a composition for preventing or treating  
PT atherosclerosis.  
XX  
XX Claim 30; Page 15; 80pp; English.  
XX  
XX The invention relates to novel antisense oligonucleotides targeted to a  
CC nucleic acid encoding vascular oestrogen receptor (ER)-alpha and/or ER-  
CC beta to modulate its expression. Antisense oligonucleotides of the  
CC invention are useful in, in vitro mitogenic or chemotactic assays to  
CC determine the modulation of estrogen receptor expression. They are also  
CC useful for preparing a composition for modulating vascular healing, for  
CC preventing or treating atherosclerotic plaque vulnerability or  
CC destabilisation and for reducing pathological angiogenesis. The present  
CC sequence is an antisense oligo targeted to human ER-beta DNA  
XX  
SQ Sequence 18 BP; 4 A; 0 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
 Best Local Similarity 94.4%; Pred. No. 1.2e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 12226 ATAAAACTCCCATAT 12243  
 DB 18 ATAAAACTCCCATCT 1

RESULT 2428  
 AAT39475/C  
 ID AAT39475 standard; DNA; 19 BP.  
 XX  
 AC AAT39475;  
 XX  
 DT 21-MAY-1997 (first entry)  
 XX  
 DE Steroidogenesis acute regulatory protein sense PCR primer 1.

XX  
 KW Human; steroidogenesis; acute regulatory protein; hscAR; analysis;  
 mutation; detection; prenatal; genetic defect; congenital; protein;  
 lipid adrenal hyperplasia; treatment; prevention; gene;  
 replacement therapy; hypercholesterolaemia; primer; PCR;  
 polymerase chain reaction; ss.  
 KW  
 XX  
 OS Synthetic.  
 XX  
 PN MO9629338-A1.  
 XX  
 PD 26-SEP-1996.  
 XX  
 PF 22-MAR-1996; 96WO-US003896.  
 XX  
 PR 23-MAR-1995; 95US-00410540.  
 XX  
 PA (REGC ) UNIV CALIFORNIA.  
 XX (UYPE-) UNIV PENNSYLVANIA.  
 XX  
 PI Miller WL, Lin D, Strause JF;  
 XX  
 DR WPI; 1996-443130/44.  
 XX  
 PT Isolated human steroidogenesis acute regulatory protein gene - used for  
 detection of mutation(s) of this gene that cause congenital lipid  
 adrenal hyperplasia.  
 PT  
 XX

PS Disclosure; Page 4; 89pp; English.  
 XX

CC The present sequence is a PCR primer (nt 66-84) for the human  
 CC steroidogenesis acute regulatory protein (hscAR) cDNA. The hscAR gene can  
 CC be analysed for mutations to detect (e.g. prenatally) genetic defects  
 CC associated with congenital lipid adrenal hyperplasia (CAH), or its  
 CC transmission to children. CAH can be treated by protein or gene  
 CC replacement therapy, which can also be used to prevent or treat  
 CC hypercholesterolaemia. A human adrenal cortex cDNA library was screened  
 CC with a mouse STAR probe to isolate a 1.6 kb insert, including an ORF for  
 CC a 285 residue protein. When it was cloned into pSPORT and expressed in  
 CC COS-1 cells cotransfected with pP450sc abd pADX, it increased the level  
 CC of pregnenolone synthesis from cholesterol or 20-alpha-hydroxycholesterol  
 CC  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 19;  
 Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 177 CTGCTGCTGCTGCTG 194  
 DB 19 CTGCTGCCGCTGCTG 2

RESULT 2429  
 AAT76159/C

ID AAT76159 standard; DNA; 19 BP.

XX AAT76159;

AC 12-SEP-1997 (first entry)

DE Human ELAM-1 antisense oligonucleotide HUMELAM1AAS1.

XX Asthma; airway epithelium; adenosine free; cystic fibrosis;  
 KW chronic obstructive pulmonary disease; bronchitis;  
 KW endothelial leukocyte adhesion molecule; ss.  
 KW  
 XX

OS Synthetic.

XX MO9640162-A1.  
 XX  
 PN 19-DEC-1996.  
 XX  
 PD 06-JUN-1996; 96WO-US009306.  
 XX  
 PF 07-JUN-1995; 95US-00474497.  
 XX  
 PR (UYEC-) UNIV EAST CAROLINA.  
 XX  
 PA Nyce JW, Metzger WJ;  
 XX  
 PI WPI; 1997-051871/05.  
 XX  
 DR  
 XX

PT Treatment of airway diseases such as asthma - by topically applying  
 PT adenosine-free antisense oligonucleotide to airway epithelium of  
 PT subject.  
 PT  
 XX

PS Claim 5; Page 28; 71pp; English.  
 XX

CC A method for treating airway disease in a subject has been produced,  
 CC which involves the topical administration of an essentially adenosine  
 CC free antisense oligonucleotide (ON) to the airway epithelium of the  
 CC subject. The present sequence is an antisense oligonucleotide  
 CC HMEELAM1AAS1 specific for the human endothelial leukocyte adhesion  
 CC molecule (ELAM-1). The method can be used to treat airway diseases  
 CC as cystic fibrosis, asthma, chronic obstructive pulmonary disease,  
 CC bronchitis and other airway diseases characterised by an inflammatory  
 CC response. By eliminating adenosine from the antisense ON, its liberation  
 CC upon antisense degradation is prevented, thereby preventing adenosine-  
 CC induced bronchoconstriction in patients with hyper-reactive airways  
 CC  
 XX  
 SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 19;  
 Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 635 GACAGAGAGAGCCAGCA 652  
 DB 19 GACAGAGAGAGCCAGCA 2

RESULT 2430  
 AAX53956/C  
 ID AAX53956 standard; DNA; 19 BP.  
 XX  
 AC AAX53956;  
 XX  
 DT 05-JUL-1999 (first entry)  
 XX  
 DE Endothelial leukocyte adhesion molecule antisense oligonucleotide.

XX Antisense oligonucleotide; multiple target; antisense treatment;  
 KW impaired respiration; inflammation; lung disease;  
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
 KW acute asthma; allergy; asthma; impeded respiration;  
 KW respiratory distress syndrome; pain; cystic fibrosis;  
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
 KW

KM chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
 KM colon cancer; breast cancer; lung cancer; pancreatic cancer;  
 KM hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
 KM prostate cancer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9913886-A1.  
 XX  
 PD 25-MAR-1999.  
 XX  
 PF 17-SEP-1998; 98WO-US019419.  
 XX  
 PR 17-SEP-1997; 97US-0059160P.  
 PR 09-JUN-1998; 98US-00093972.  
 XX  
 PA (UYEC-) UNIV EAST CAROLINA.  
 XX  
 PI Nyce JW;  
 XX  
 DR WPI; 1999-229400/19.  
 XX  
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary  
 PT vasoconstriction.  
 PT  
 PS Disclosure; Page 47; 120pp; English.  
 XX  
 CC The specification describes antisense oligonucleotides (AAV52869-X55271)  
 CC directed against at least 2 mRNAs selected from target genes, coding and  
 CC non-coding regions of RNAs corresponding to target genes, gene initiation  
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
 CC -end and the juxta-section between coding and non-coding regions and all  
 CC segments of RNAs encoding proteins associated with one or more diseases,  
 CC conditions or mixtures. The antisense oligonucleotides may be derived  
 CC from sequences AAX55272-74. These multiple target oligonucleotides  
 CC (specifically AAX55180-271) can be used for the antisense treatment of  
 CC diseases and conditions. Typical diseases and conditions are those  
 CC associated with impaired respiration and inflammation, including lung  
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
 CC acute asthma, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
 CC well as all types of cancers which may metastasize or have metastasized  
 CC to the lungs, including breast and prostate cancer  
 XX  
 SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16.4; DB 1; Length 19;  
 Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 635 GACGAGAAGCCAGCA 652  
 Db 19 GACGAGAAGCCAGCA 2  
 |||||  
 AAAA33399/c  
 ID AAAA33399 standard; DNA; 19 BP.  
 XX  
 AC AAAA33399;  
 XX  
 DT 28-JUL-2000 (first entry)  
 XX  
 DE Low adenosine antisense oligonucleotide SEQ ID NO:1088.  
 XX  
 KM Human; adenosine receptor; low adenosine antisense oligonucleotide;  
 KM phosphorothioate; impaired respiration; inflammation; allergy;  
 KM allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
 KM antiallergic; antiaesthetic; cytostatic; analgesic; impaired airway;

KM lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
 KM respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
 KM pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
 KM cancer; leukemia; lymphoma; carcinoma; metastasis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200009525-A2.  
 XX  
 PD 24-FEB-2000.  
 XX  
 PF 03-AUG-1999; 99WO-US017712.  
 XX  
 PR 03-AUG-1998; 98US-0095212P.  
 XX  
 PA (UYEC-) UNIV EAST CAROLINA.  
 XX  
 PI Nyce JW;  
 XX  
 DR WPI; 2000-205971/18.  
 XX  
 PT New antisense oligonucleotides useful for treating e.g. pulmonary  
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
 PT cancers.  
 PT  
 PS Claim 18; Page 401; 1343pp; English.  
 XX  
 CC The present invention describes a new composition comprising an antisense  
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
 CC nucleic acids involved in bronchoconstriction, allergies, and/or  
 CC inflammation. The ON can have antiinflammatory, antiallergic,  
 CC antiaesthetic, cytostatic and analgesic activities. The compositions are  
 CC useful for the treatment of diseases associated with inflammation,  
 CC impaired airways, including lung disease and diseases whose secondary  
 CC effects afflict the lungs of a subject. They can be used for treating  
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
 CC impeded respiration, respiratory distress syndrome, pain, cystic  
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
 CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,  
 CC carcinomas, and cancers which may metastasize to the lungs, including  
 CC breast and prostate cancer. The reduction of the adenosine content of the  
 CC ON reduces side effects. The A-containing ONs break down with the  
 CC release of deoxyadenosine which activates adenosine receptors causing  
 CC bronchoconstriction and inflammation. AAAA23313 to AAAA35312 represent the  
 CC nucleotide sequences given in the sequence listing from the present  
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
 CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAAA23323 to  
 CC AAAA33992) are specifically claimed ONs from the present invention. N.B.  
 CC Sequences given in the disclosure of the present invention do not match  
 CC up with their corresponding SEQ ID NO: sequences given in the sequence  
 CC listing  
 XX  
 SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16.4; DB 1; Length 19;  
 Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 635 GACGAGAAGCCAGCA 652  
 Db 19 GACGAGAAGCCAGCA 2  
 |||||  
 AAF19521/c  
 ID AAF19521 standard; DNA; 19 BP.  
 XX  
 AC AAF19521;  
 XX  
 DT 14-MAR-2001 (first entry)  
 XX





CC sequence.  
XX Sequence 19 BP; 0 A; 8 C; 7 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 0.1%; Score 16.4; DB 1; Length 19;  
Best Local Similarity 72.2%; Pred. No. 1.3e+03;  
Matches 13; Conservative 4; Mismatches 1; Indels 0; Gaps 0;  
OY 163 TGGCGCTGCTGCGCTGC 180  
:|||||:|||||:  
DB 2 UGGCGCTGCTGCGCTGC 19  
RESULT 2434  
ADH16641/c  
ID ADH16641 standard; RNA; 19 BP.  
XX ADH16641;  
XX  
XX 11-MAR-2004 (first entry)  
XX  
DE Human BACE siNA lower strand, SEQ ID NO:431.  
XX  
XX RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping;  
KW Alzheimer's disease; dementia; stroke; cardiovascular accident;  
KW beta-secretase; BACE; human; ss.  
XX  
XX Homo sapiens.  
XX  
XX W02003070895-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 18-FEB-2003; 2003WC-US004710.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 25-JUL-2002; 2002US-00205309.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI  
XX WPI; 2003-697608/66.  
XX  
XX New short interfering nucleic acids, useful e.g. for treatment and  
PT diagnosis of Alzheimer's disease, which down regulates expression of the  
PT beta-secretase gene.  
XX  
XX Example 3; SEQ ID NO 431; 144pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human beta-secretase (BACE) gene by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the BACE gene in cells, tissue explants or

CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
CC for the treatment of a variety of conditions. They may be used for  
CC treating Alzheimer's disease or other degenerative conditions such as  
CC dementia and stroke/cardiovascular accident. The siNAs are also useful  
CC for drug screening, diagnosis, therapeutic target identification and  
CC validation, genetic engineering, pharmacogenomics, studying gene  
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
CC The present sequence represents the lower strand of a human BACE-targeted  
CC double-stranded siNA.  
XX  
XX Sequence 19 BP; 4 A; 7 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 16.4; DB 1; Length 19;  
Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 163 TGGCGCTGCTGCGCTGC 180  
:|||||:|||||:  
DB 18 TGGCGCTGCTGCGCTGC 1  
RESULT 2435  
ABZ95215/c  
ID ABZ95215 standard; DNA; 19 BP.  
XX  
XX ABZ95215;  
AC  
XX 17-OCT-2003 (first entry)  
XX  
XX Human ELAM-1 antisense fragment no.1080.  
DE  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX W0200285308-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sendrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
PI  
XX WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX Disclosure; SEQ ID NO 10457; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also

for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match  
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 19;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

635 GACGAGAGAGCCAGCA 652  
19 GACGAGAGAGCCAGCA 2

RESULT 2436  
ABD19166/C  
ID ABD19166 standard; DNA; 19 BP.  
XX  
XX ABD19166;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
XX Human ELAM-1 DNA fragment 1080.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ds.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EP1G-) EP1GENESIS PHARM INC.  
XX  
XX Myce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahbuddin S;  
XX  
XX WPI; 2003-093056/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX oligonucleotide containing less percentage of adenosine, targeted to  
XX nucleic acids associated with lung airway or lung dysfunction, and  
XX bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 10457; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery

device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match  
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 19;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

635 GACGAGAGAGCCAGCA 652  
19 GACGAGAGAGCCAGCA 2

RESULT 2437  
ADH70599  
ID ADH70599 standard; DNA; 19 BP.  
XX  
XX ADH70599;  
XX  
XX 25-MAR-2004 (first entry)  
XX  
XX Human Vbeta gene repeat sequence #389.  
XX  
XX human; T-cell associated disease; Vbeta; autoimmune disease;  
XX degenerative nervous system disease; graft versus host disease;  
XX hypersensitivity disease; infectious disease; neoplastic disease;  
XX Addison's disease; atrophic gastritis;  
XX degenerative nervous system disease; multiple sclerosis;  
XX Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;  
XX allergy; type II hypersensitivity; Goodpasture's syndrome;  
XX type IV hypersensitivity; leprosy; infectious disease; viral infection;  
XX HIV; fungal infection; Candida; parasitic infection; schistosoma;  
XX filarial bacterial infection; Mycobacterium; neoplastic disease;  
XX lymphoproliferative disease; leukemia; lymphoma; cancer; brain cancer;  
XX breast cancer; ds.  
XX  
XX Homo sapiens.  
XX  
XX US2002150891-A1.  
XX  
XX 17-OCT-2002.  
XX  
XX 05-MAR-1999; 99US-00263959.  
XX  
XX 19-SEP-1994; 94US-00309335.  
XX  
XX 19-SEP-1995; 95US-00531241.  
XX  
XX (HOOD/) HOOD L E.  
XX  
XX (ROWE/) ROWEN L.  
XX  
XX Hood LE, Rowen L;  
XX  
XX WPI; 2004-059052/06.  
XX

XX Kit for diagnosing and treating T-cell associated diseases e.g.  
PT autoimmune, degenerative nervous system and infectious disease, comprises  
PT nucleic acid primers specifically priming and allowing amplification of a  
PT Vbeta gene.  
XX  
XX  
PS Disclosure; SEQ ID NO 793; 164pp; English.  
XX  
XX The invention relates to a kit for diagnosing and treating T-cell  
CC associated diseases which comprises a panel of nucleic acid primers  
CC specifically priming and allowing amplification of each Vbeta gene,  
CC VbetaNA or cDNA. The kit is useful for diagnosing organ transplant  
CC rejection and diagnosing and treating T-cell associated diseases  
CC including autoimmune diseases, degenerative nervous system diseases,  
CC graft versus host disease, hypersensitivity diseases, infectious diseases  
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,  
CC atrophic gastritis, Degenerative nervous system diseases include multiple  
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type  
CC I hypersensitivities such as contact with allergens that lead to  
CC allergies, Type II hypersensitivities such as those present in  
CC Goodpasture's syndrome and Type IV hypersensitivities such as those  
CC manifested in leprosy. Infectious diseases include viral infections  
CC caused by viruses such as HIV, fungal infections such as those caused by  
CC the yeast genus Candida, parasitic infections such as those caused by  
CC schistosomes, filaria and bacterial infections such as those caused by  
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases  
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,  
CC breast. The present sequence represents a Vbeta gene repeat sequence.  
XX  
SQ Sequence 19 BP; 0 A; 6 C; 5 G; 8 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 16.4; DB 1; Length 19;  
Best Local Similarity 94.4%; Pred. No. 1.3e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 176 GCTGCTGCTGCTGCTGCT 193  
Db 2 GCTGCTGCTGCTGCTGCT 19  
XX  
RESULT 2438  
AAA55807  
ID AAA55807 standard; DNA; 20 BP.  
XX  
AC AAA55807;  
XX  
DT 01-SEP-2000 (first entry)  
XX  
DE Human histone deacetylase HD2 antisense oligonucleotide SEQ ID NO:52.  
XX  
XX Human, DNA methyltransferase; DNA Methylase; antisense oligonucleotide;  
KW modulation; inhibition; gene expression; combination therapy; p16;  
KW histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;  
KW methylation; gene therapy; tumour; cytostatic; antiasthmatic;  
KW antiinflammatory; inflammation; asthma; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200023112-A1.  
PN  
XX  
PD 27-APR-2000.  
XX  
XX 19-OCT-1999; 99MO-US024278.  
PF  
XX  
XX 19-OCT-1998; 98US-0104804P.  
PR  
XX  
XX (METH-) METHYLGENE INC.  
PA  
XX  
XX Beesterman JM, Macleod AR, Siders WM;  
PI  
XX  
XX WPI; 2000-339532/29.  
DR  
XX  
XX Inhibiting gene expression e.g. DNA methyltransferase, by treating cells

PT with a synergistic amount of antisense oligonucleotide and protein  
PT effectors e.g. 5-aza-cytidine of gene products, useful for gene therapy  
PT of e.g. tumors.  
XX  
XX  
PS Disclosure; Page 29; 99pp; English.  
XX  
XX The present invention describes a method for inhibiting the expression of  
CC a gene in a cell comprising contacting the cell with an effective  
CC synergistic amount of an antisense oligonucleotide which inhibits  
CC expression of the gene, and an effective synergistic amount of a protein  
CC effector of a product of the gene. Also described are: (1) a method for  
CC treating a disease responsive to inhibition of a gene in a mammal; (2) a  
CC method for inhibiting tumour growth in mammal; (3) an inhibitor of a gene  
CC comprising an antisense oligonucleotide which inhibits expression of the  
CC gene in operable association with a protein effector of a gene product;  
CC and (4) a pharmaceutical composition comprising the inhibitor of (3). The  
CC methods and compositions are useful as analytical tools for transgenic  
CC studies and as therapeutic tools, e.g. as gene therapy tools for human  
CC diseases including benign and malignant tumours, inflammation or asthma.  
CC The methods, inhibitors and compositions of the invention that inhibit  
CC expression or activity of a gene or gene product may be used to treat  
CC patients having, or predisposed to developing, a disease responsive to  
CC inhibition of the gene. These may also be used to activate silenced genes  
CC to provide missing gene functions and improve a given condition.  
CC Furthermore, the methods and compositions are useful as probes of the  
CC physiological function of a gene product in an experimental cell culture  
CC or animal system; and to evaluate the effect of inhibiting gene activity  
CC or expression. AAA55758 to AAA55842 represent oligonucleotide sequences  
CC which are used in the exemplification of the present invention  
XX  
SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 177 CTGCTGCTGCTGCTGCTG 194  
Db 2 CTGCTGCTGCTGCTGCTG 19  
XX  
RESULT 2439  
AAA66287/c  
ID AAA66287 standard; DNA; 20 BP.  
XX  
AC AAA66287;  
XX  
DT 09-OCT-2000 (first entry)  
XX  
DE Dog genomic marker oligonucleotide sequence SEQ ID NO:149.  
XX  
XX Dog; genome; genomic marker; radiation hybrid map; identification;  
KW chromosome location; gene marker; polymorphic microsatellite marker;  
KW phenotype; behaviour; pedigree; ss.  
XX  
XX Canis familiaris.  
OS  
XX  
XX WO200029615-A2.  
PN  
XX  
PD 25-MAY-2000.  
XX  
XX 15-NOV-1999; 99MO-IB001907.  
PF  
XX  
XX 13-NOV-1998; 98US-0108193P.  
PR  
XX  
XX (CNRS ) CNRS CENT NAT RECH SCI.  
PA  
XX  
XX Galibert F, Andre C;  
PI  
XX  
XX WPI; 2000-387821/33.  
DR  
XX  
XX New radiation hybrid map of the dog, Canine familiaris, genome, useful  
PT for e.g. identifying genes implicated in phenotypic and behavioral traits

PT or in genetic diseases and for studying dog pedigrees.

XX Claim 1; Page 59; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine  
CC familiaris) genome comprising the genome location of a marker selected  
CC from AAH6613 to AAH66942. The radiation hybrid map is useful for  
CC identifying and localising dog genes, since it covers approximately 80 %  
CC of the dog genome and provides a dense map integrating different types  
CC (i.e. Type I and Type II) of markers. The map and the dog genome markers  
CC (or complementary sequences) are especially useful to identify genes  
CC responsible for phenotypic and behavioural traits in dogs, to identify  
CC morbid genes, to analyse diseases and identify implicated genes in such  
CC diseases and their alleles, and to study dog pedigrees. They may also be  
CC useful for isolating corresponding human gene sequences e.g. genes  
CC involved in genetic diseases

XX Sequence 20 BP; 7 A; 6 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 1.4e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 177 CTGCTGCTGCTGCTGCTG 194

Db 18 CTCCTGCTGCTGCTGCTG 1

RESULT 2440

AAH43117

ID AAH43117 standard; DNA; 20 BP.

AC AAH43117;

DT 19-SEP-2001 (first entry)

DE Antisense oligo, target HDAC-2 132-152.

XX Antisense; histone deacetylase; HDAC-1; HDAC-2; HDAC-4; inhibitor;

KW cell proliferation; cancer; restenosis; psoriasis; protozoal infection;

KM fungal infections; ss.

OS Synthetic.

XX WO200138322-A1.

XX 31-MAY-2001.

XX 22-NOV-2000; 2000WO-IB001881.

XX 23-NOV-1999; 99US-0167035P.

PA (METH-) METHYLGENE INC.

PI DeJorne D, Ruel R, Lavoie R, Thibault C, Abou-Khalil E;

XX WPI; 2001-432601/46.

XX New inhibitors of histone deacetylase e.g. N-hydroxy-5-(4-

PT (benzenesulfonylamino)-phenyl)-4-yn-2-pentanamide for treating cancer,

PT restenosis or fungal infections.

XX Disclosure; Page 40; 147pp; English.

XX The sequences given in AAH43115-21 are oligonucleotides which are  
CC antisense to the histone deacetylase gene, HDAC-2. These oligonucleotides  
CC may be used in combination with an inhibitor of histone deacetylase  
CC enzyme function, to give an improved inhibitory effect, thereby reducing  
CC the amount of inhibitor required to obtain a given inhibitory effect.  
CC Compounds containing these oligonucleotides may be used to treat cell  
CC proliferation conditions such as cancer, restenosis or psoriasis. They  
CC can also be used to treat protozoal and fungal infections

SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 1.4e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 177 CTGCTGCTGCTGCTGCTG 194

Db 2 CTCCTGCTGCTGCTGCTG 19

RESULT 2441

AAH57033

ID AAH57033 standard; DNA; 20 BP.

XX AAH57033;

XX 10-SEP-2001 (first entry)

XX Human oestrogen receptor alpha search PCR primer 58.

XX Ligand dependent transcriptional factor; oestrogen receptor; ER;

KW glucocorticoid receptor protein; GR; mineralocorticoid receptor protein;

KM GR; peroxisome proliferator-activated receptor protein; PPAR;

KM progesterone receptor protein; PR; progesterone X receptor protein; RXR;

KM thyroid hormone receptor protein; TR; vitamin D receptor protein; VDR;

XX transactivation; ERalpha; breast cancer; PCR primer; probe; ss.

XX Homo sapiens.

XX WO200142307-A1.

XX 14-JUN-2001.

XX 01-DEC-2000; 2000WO-JP008553.

XX 07-DEC-1999; 99JP-00348022.

XX 27-DEC-1999; 99JP-00370667.

XX 07-JUL-2000; 2000JP-00207011.

XX 21-JUL-2000; 2000JP-00220508.

XX 02-AUG-2000; 2000JP-00234053.

XX 03-AUG-2000; 2000JP-00235460.

XX 03-AUG-2000; 2000JP-00235461.

XX 03-AUG-2000; 2000JP-00235463.

XX (SUMO ) SUMITOMO CHEM CO LTD.

XX Saito K, Ohe N, Satoh H;

XX WPI; 2001-367866/38.

XX Example 9; Page 226; 276pp; English.

XX The present invention relates to ligand dependent transcriptional factors  
CC including oestrogen receptor (ER) alpha and beta protein, glucocorticoid  
CC receptor protein (GR), mineralocorticoid receptor protein (MR),  
CC peroxisome proliferator-activated receptor protein (PPAR), progesterone  
CC receptor protein (PR), progesterone X receptor protein (RXR), thyroid hormone  
CC acids encoding them and cells comprising them and a specified reporter  
CC gene for the ligand dependent transcriptional factor. These proteins are  
CC useful in the modulation of ligand dependent transcriptional factor  
CC activity. The cells, mutant ERalpha and the polynucleotide encoding it  
CC may be used in assays for qualitatively analysing an activity for  
CC transactivation of a reporter gene by a test ERalpha, for screening  
CC mutant ligand dependent transcriptional factors, for evaluating an  
CC activity for transactivation of a reporter gene by a test ERalpha and/or  
CC for screening a compound useful for treating a disorder of a mutant  
CC ERalpha, especially breast cancer

```

XX      SQ      Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX      Query Match
XX      Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
XX      Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy      175 CGCTGCTGCTGCTGCTGC 192
      |||||
Db      2 CGCTGCTGCTGCTGCTGC 19

RESULT 2442
AAC89537
ID AAC89537 standard; DNA; 20 BP.
XX
XX AAC89537;
XX
XX 08-MAR-2001 (first entry)
XX
XX Human HDAC-2 PCR primer SEQ ID NO: 7.
XX
XX DE
XX KW Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
XX KW HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
XX KW gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200071703-A2.
XX
XX 30-NOV-2000.
XX
XX PF 03-MAY-2000; 2000MO-IB001252.
XX
XX PR 03-MAY-1999; 99US-0132287P.
XX
XX PA (METH-) METHYLGENE INC.
XX
XX PI Macleod AR, Li Z, Besterman JM;
XX
XX DR WPI; 2001-016407/02.
XX
XX PT Antisense oligonucleotide that inhibits expression of a histone
XX PT deacetylase, useful for treating and/or alleviating the symptoms of
XX PT neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX
XX PS Disclosure; Page 12; 125pp; English.
XX
XX CC The present invention provides inhibitors of histone deacetylase enzymes
XX CC such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX CC inhibitors may be antisense strands or they may be compounds identified
XX CC by contacting the enzyme with the compound and measuring the resulting
XX CC enzyme activity. These inhibitors are useful for treating cancers and for
XX CC identifying which histone deacetylase is involved in a neoplasia
XX
XX SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX      Query Match
XX      Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
XX      Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Oy      177 CTGCTGCTGCTGCTGCTG 194
      |||||
Db      2 CTCTGCTGCTGCTGCTG 19

RESULT 2443
AAC89546
ID AAC89546 standard; DNA; 20 BP.
XX
XX AAC89546;
XX
XX 08-MAR-2001 (first entry)
XX

```

```

XX      DE
XX      Human HDAC-2 antisense sequence SEQ ID NO: 16.
XX
XX KW Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
XX KW HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
XX KW gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200071703-A2.
XX
XX 30-NOV-2000.
XX
XX PF 03-MAY-2000; 2000MO-IB001252.
XX
XX PR 03-MAY-1999; 99US-0132287P.
XX
XX PA (METH-) METHYLGENE INC.
XX
XX PI Macleod AR, Li Z, Besterman JM;
XX
XX DR WPI; 2001-016407/02.
XX
XX PT Antisense oligonucleotide that inhibits expression of a histone
XX PT deacetylase, useful for treating and/or alleviating the symptoms of
XX PT neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX
XX PS Example 1; Page 24; 125pp; English.
XX
XX CC The present invention provides inhibitors of histone deacetylase enzymes
XX CC such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX CC inhibitors may be antisense strands or they may be compounds identified
XX CC by contacting the enzyme with the compound and measuring the resulting
XX CC enzyme activity. These inhibitors are useful for treating cancers and for
XX CC identifying which histone deacetylase is involved in a neoplasia
XX
XX SQ Sequence 20 BP; 0 A; 9 C; 5 G; 4 T; 2 U; 0 Other;
XX
XX      Query Match
XX      Best Local Similarity 83.3%; Score 16.4; DB 1; Length 20;
XX      Matches 15; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
XX
Oy      177 CTGCTGCTGCTGCTGCTG 194
      |||||
Db      2 CUCCTGCTGCTGCTGCTG 19

RESULT 2444
ABS59315
ID ABS59315 standard; DNA; 20 BP.
XX
XX AC ABS59315;
XX
XX DT 05-NOV-2002 (first entry)
XX
XX DE Human CAS gene antisense oligonucleotide, ISIS 128275.
XX
XX KW Human; ss; antisense; cellular apoptosis susceptibility gene;
XX KW antiinflammatory; antitumour; cytostatic; CAS; CSEI; CSP;
XX KW chromosome 20q13; mitosis; apoptosis; proliferation; cancer;
XX KW importin-alpha; nuclear localisation; cell cycle;
XX KW hyperproliferative disorder; degenerative disorder; Alzheimer's disease;
XX KW Parkinson's disease; amyotrophic lateral sclerosis; ALS;
XX KW retinitis pigmentosa; blood cell disorder; gene therapy; infection;
XX KW inflammation; tumour.
XX
XX OS Homo sapiens.
XX
XX SS Synthetic.
XX
XX Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX

```

```

FT      /note="OTHER = phosphorothioate backbone, all cytidine
FT      residues are 5-methylcytidines"
FT      1..5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note="OTHER = 2'-O-methoxyethyl nucleotides"
FT      modified_base
FT      16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note="OTHER = 2'-O-methoxyethyl nucleotides"
FT      WO200246367-A2.
XX      13-JUN-2002.
XX      29-OCT-2001; 2001WO-US051048.
XX      01-NOV-2000; 2000US-00705299.
XX      (ISIS-) ISIS PHARM INC.
XX      Cowseert LM, Freier SM;
XX      WPI; 2002-608254/65.
XX      New antisense compound that hybridizes and inhibits nucleic acid encoding
XX      cellular apoptosis susceptibility gene, useful for treating a
XX      hyperproliferative disorder such as cancer.
XX      Claim 3; Page 92; 135pp; English.
XX      The invention discloses antisense compounds, of 8 - 50 nucleobases in
XX      length, targeted to a nucleic acid molecule encoding a human cellular
XX      apoptosis susceptibility gene (CAS or CSE1 or CSP), located on chromosome
XX      20q13. CAS has been implicated in the regulation of mitosis, apoptosis
XX      and cellular proliferation and is highly expressed in some cancer cells.
XX      CAS has also been shown to mediate export of importin-alpha from the
XX      nucleus. Importin-alpha is a nuclear import receptor for nuclear
XX      localisation signal-containing proteins and deregulation of importin
XX      transport is involved in cell cycle defects. The antisense compounds
XX      specifically hybridise with, and inhibit expression of, the gene or
XX      CC specifically hybridise with an 8 nucleobase portion of its active site.
XX      The antisense compounds are useful for inhibiting the expression of a
XX      cellular apoptosis susceptibility gene in cells or tissues and for
XX      treating an animal having a disease or condition associated with a
XX      cellular apoptosis susceptibility gene, where the disease or condition is
XX      a hyperproliferative disorder such as cancer, preferably breast or colon
XX      cancer, degenerative disorders such as Alzheimer's disease, Parkinson's
XX      disease, amyotrophic lateral sclerosis (ALS), retinitis pigmentosa and
XX      blood cell disorders. The compounds are also useful for diagnostics,
XX      therapeutics, prophylaxis, as research reagents and kits, for
XX      distinguishing functions of various members of a biological pathway, in
XX      antisense gene therapy and prophylactically (e.g. to prevent or delay
XX      infection, inflammation or tumour formation). The antisense
XX      oligonucleotides in ABS59252-ABS59322 are targeted to the human CAS gene
XX      SQ      Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX      Query Match      0.1%; Score 16.4; DB 1; Length 20;
XX      Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX      Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX      QY      2409 CTGATTAAAGATTGAAA 2426
XX      ||||| ||||| |||||
XX      Db      1 CTGATTACAGATTGAAA 18
XX
XX      RESULT 2445
XX      ABL57369
XX      ID      ABL57369 standard; DNA; 20 BP.
XX      AC      ABL57369;
XX

```

```

DT      12-AUG-2002 (first entry)
XX      Breast-specific BS265 sequencing primer.
XX      BS265; human; breast; cancer; tumour; metastasis; diagnosis;
XX      gene therapy; primer; ss.
XX      Homo sapiens.
XX      OS      US2002034749-A1.
XX      PN      21-MAR-2002.
XX      PD      07-MAY-2001; 2001US-00850178.
XX      PF      18-NOV-1997; 97US-00972376.
XX      PR      18-NOV-1998; 98US-00193944.
XX      PA      (BILL/) BILLINGEL P A.
XX      PA      (COHE/) COHEN M.
XX      PA      (COLP/) COLPITTS T L.
XX      PA      (FRIE/) FRIEDMAN P N.
XX      PA      (GORD/) GORDON J.
XX      PA      (GRAN/) GRANADOS E N.
XX      PA      (HODG/) HODGES S C.
XX      PA      (KLAS/) KLAS M R.
XX      PA      (KRAT/) KRATOCHVIL J D.
XX      PA      (ROBE/) ROBERTS-RAPP L A.
XX      PA      (RUSSE/) RUSSELL J C.
XX      PA      (STRO/) STROUPE S D.
XX      PI      Billngel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J,
XX      PI      Grandos EN, Hodges SC, Kلاس MR, Kratochvil JD, Roberts-Rapp LA,
XX      PI      Russell JC, Strophe SD;
XX      DR      WPI; 2002-403712/43.
XX      PT      New BS265 proteins and nucleic acids, useful for detecting, diagnosing,
XX      PT      staging, monitoring, prognosticating, in vivo imaging, preventing,
XX      PT      treating, or determining the predisposition of an individual to breast
XX      PT      cancer.
XX      PS      Example 2; Page 39; 52pp; English.
XX      CC      The present sequence is of a primer that was used in the sequencing of
XX      CC      human breast BS265 expressed sequence tag (EST)-specific clones (see
XX      CC      ABL57345-63). The primer is based on a BS265 consensus sequence (see
XX      CC      ABL57350). The invention provides a set of contiguous and overlapping
XX      CC      cDNA sequences, designated as BS265 and transcribed from breast tissue,
XX      CC      and the polypeptides encoded by them. These are useful for detecting,
XX      CC      diagnosing, staging, monitoring, prognosticating, in vivo imaging,
XX      CC      preventing, treating, or determining the predisposition of an individual
XX      CC      to diseases and conditions of the breast, especially tumours and
XX      CC      metastases
XX      SQ      Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX      Query Match      0.1%; Score 16.4; DB 1; Length 20;
XX      Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX      Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX      QY      829 CCTGTCAACTCTGATCA 846
XX      ||||| ||||| |||||
XX      Db      2 CCTGTCAACTCTGTTCA 19
XX
XX      RESULT 2446
XX      ADF69485
XX      ID      ADF69485 standard; DNA; 20 BP.
XX      AC      ADF69485;
XX      DT      12-FEB-2004 (first entry)
XX

```

XX Tapesia acuformis PCR primer SEQ ID NO:43.  
 DE detection; wheat; barley; fungus; fungal pathogen; fungicide; cereal;  
 XX Tapesia yallundae; Tapesia acuformis; eyespot disease; PCR primer; ss.  
 KM Tapesia yallundae; Tapesia acuformis; eyespot disease; PCR primer; ss.  
 XX Synthetic.  
 OS Oculimacula acuformis.  
 XX WO2003085378-A2.  
 XX 16-OCT-2003.  
 PD 27-MAR-2003; 2003WO-US009706.  
 PF 03-APR-2002; 2002US-0369796P.  
 XX (SYGN ) SYNGENTA PARTICIPATIONS AG.  
 PA Barnett CJ, Beck JJ;  
 XX WPI; 2003-804348/75.  
 DR New nucleic acid molecules useful for detecting a fungal pathogen, for  
 XX monitoring disease development in plant populations and for deriving  
 PT primers for polymerase chain reaction-based diagnostic assays.  
 PS Claim 3; SEQ ID NO 43; 41bp; English.  
 XX The present invention describes a method for detecting wheat and barley  
 CC fungal pathogens which are resistant to certain fungicides. The wheat and  
 CC barley fungi are Tapesia yallundae and Tapesia acuformis, which cause  
 CC eyespot disease. The present invention describes nucleic acid molecules,  
 CC a kit and a method which are useful for detecting the fungal pathogen,  
 CC and can be used for monitoring disease development in plant populations.  
 CC The present sequence is used in the exemplification of the present  
 CC invention.  
 CC Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
 Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2971 CCAAAACGAGGTGATCC 2988  
 DB 1 CCAGAACGAGGTGATCC 18

RESULT 2447  
 ADF69486  
 ID ADF69486 standard; DNA; 20 BP.  
 XX ADF69486;  
 AC  
 XX 12-FEB-2004 (first entry)  
 DT Tapesia acuformis PCR primer SEQ ID NO:44.  
 DE detection; wheat; barley; fungus; fungal pathogen; fungicide; cereal;  
 KM Tapesia yallundae; Tapesia acuformis; eyespot disease; PCR primer; ss.  
 XX Synthetic.  
 OS Oculimacula acuformis.  
 XX WO2003085378-A2.  
 XX 16-OCT-2003.  
 PD 27-MAR-2003; 2003WO-US009706.  
 PF 03-APR-2002; 2002US-0369796P.  
 XX

PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
 XX Barnett CJ, Beck JJ;  
 PI WPI; 2003-804348/75.  
 DR New nucleic acid molecules useful for detecting a fungal pathogen, for  
 XX monitoring disease development in plant populations and for deriving  
 PT primers for polymerase chain reaction-based diagnostic assays.  
 PS Claim 3; SEQ ID NO 44; 41bp; English.  
 XX The present invention describes a method for detecting wheat and barley  
 CC fungal pathogens which are resistant to certain fungicides. The wheat and  
 CC barley fungi are Tapesia yallundae and Tapesia acuformis, which cause  
 CC eyespot disease. The present invention describes nucleic acid molecules,  
 CC a kit and a method which are useful for detecting the fungal pathogen,  
 CC and can be used for monitoring disease development in plant populations.  
 CC The present sequence is used in the exemplification of the present  
 CC invention.  
 CC Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
 Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2971 CCAAAACGAGGTGATCC 2988  
 DB 3 CCAGAACGAGGTGATCC 20

RESULT 2448  
 ADF8461/C  
 ID ADF8461 standard; DNA; 20 BP.  
 XX ADF8461;  
 AC  
 XX 26-FEB-2004 (first entry)  
 DT Single nucleotide polymorphism detection primer, SEQ ID NO 2044.  
 DE human; single nucleotide polymorphism; microarray; side effect; ss;  
 XX human; single nucleotide polymorphism; microarray; side effect; ss;  
 KM primer; PCR.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX JP2003235571-A.  
 PN 26-AUG-2003.  
 PD 12-FEB-2002; 2002JP-00034717.  
 XX 12-FEB-2002; 2002JP-00034717.  
 PR (KAGA-) KAGAKU GIUTTSU SHINKO JIGYODAN.  
 PA WPI; 2003-820454/77.  
 XX Novel polynucleotide useful for detecting single nucleotide polymorphisms  
 DR in human gene.  
 PT Claim 2; SEQ ID NO 2044; 704bp; Japanese.  
 PS The invention relates to a novel polynucleotide isolated and purified  
 CC from a human gene having any one of 935 fully defined sequences as given  
 CC in specification, or a sequence having a base substitution. The invention  
 CC further relates to: an oligonucleotide containing single nucleotide  
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA  
 CC fragments from any one of 1220 fully defined sequences as given in  
 CC specification; a labelling probe containing the SNP containing oligo; and  
 CC a microarray equipped with the SNP containing oligo. The isolated human



CC gene of the invention is useful for detecting the single nucleotide  
 CC polymorphisms in human gene. The isolated human gene is also useful for  
 CC diagnosis of disease and determination of side effect to a medical agent.  
 CC The isolated human gene is also effective in detecting single nucleotide  
 CC polymorphisms in a human gene. This polynucleotide sequence represents  
 CC one of the PCR primers used in the single nucleotide polymorphism  
 CC detection method of the invention.

XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 1.4e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1898 GAACTTGTGGCTTCCCA 1915

18 GAACTTGTGGCTTCCGA 1

RESULT 2449

ADJ15510

ADJ15510 standard; DNA; 20 BP.

ADJ15510;

20-MAY-2004 (first entry)

Antisense DNA oligo used to modulate human LRH1 expression Seqid 60.

human; ss; liver related homologue-1; LRH1; NR5A2; antisense;

phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;

low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;

gall stone; triglyceridaemia; obesity; hepatitis;

hepatocellular carcinoma; aromatase; cytosatic; antilipemic;

antiarteriosclerotic; anorectic; hepatotropic; litholytic;

antiinflammatory; virucidal.

Homo sapiens.

Synthetic.

Key Location/Qualifiers

modified\_base 1..20

/\*tag= b

/mod\_base= OTHER

/label= OTHER= phosphorothioate backbone

1..5

/\*tag= a

/mod\_base= OTHER

/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All

modified\_base 15..20

/\*tag= C

/mod\_base= OTHER

/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All

cytidine nucleobases are 5-methylcytidine."

WO2004003201-A2.

08-JAN-2004.

01-JUL-2003; 2003WO-US020865.

01-JUL-2002; 2002US-0392813P.

(PHAA ) PHARMACIA CORP.

Kane CD;

WPI; 2004-083058/08.

New antisense oligonucleotides targeted to a nucleic acid encoding liver

related homologue-1 (LRH1), useful for treating breast cancer,

dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.

XX Example 15; SEQ ID NO 60; 909pp; English.

XX This invention relates to novel antisense compounds useful for modulating

XX the expression of liver related homologue-1 (LRH1) and splice variants

XX thereof. Specifically, it refers to compositions 8-30 nucleobases in

XX length that target a portion of an active site on the nucleic acid

XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan

XX nuclear receptor protein that functions as a tissue specific

XX transcription factor. The present invention describes antisense

XX oligonucleotides that comprise at least one modified internucleoside

XX linkage, a phosphorothioate linkage, at least one modified sugar moiety,

XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-

XX methylcytidine. These antisense compounds are useful for treating or

XX diagnosing a disease associated with LRH1, such as breast cancer,

XX dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high

XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,

XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic

XX hepatitis, as well as hepatocellular carcinoma or a condition associated

XX with aromatase activity. Accordingly, these compositions exhibit

XX cytosatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,

XX litholytic, antiinflammatory and virucidal activities. This

XX oligonucleotide sequence is an antisense DNA oligo used to modulate the

XX expression of the human LRH1 protein of the invention.

XX Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 1.4e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

3023 TTGCAGCAAGTCTTCC 3040

3 TTACAGCAAGTCTTCC 20

RESULT 2450

ADJ15645

ADJ15645 standard; DNA; 20 BP.

ADJ15645;

20-MAY-2004 (first entry)

Antisense DNA oligo used to modulate human LRH1 expression Seqid 195.

human; ss; liver related homologue-1; LRH1; NR5A2; antisense;

phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;

low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;

gall stone; triglyceridaemia; obesity; hepatitis;

hepatocellular carcinoma; aromatase; cytosatic; antilipemic;

antiarteriosclerotic; anorectic; hepatotropic; litholytic;

antiinflammatory; virucidal.

Homo sapiens.

Synthetic.

Key Location/Qualifiers

modified\_base 1..20

/\*tag= b

/mod\_base= OTHER

/label= OTHER= phosphorothioate backbone

1..5

/\*tag= a

/mod\_base= OTHER

/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All

modified\_base 15..20

/\*tag= C

/mod\_base= OTHER

/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All

cytidine nucleobases are 5-methylcytidine."

```

PN WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 195; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolemia, gall stones,
XX triglyceridemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antiinflammatory, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3023 TTGCAAGCAAGCTTTCC 3040
XX 1 TTACAGCAAGCTTTCC 18
XX
XX RESULT 2451
XX ADJ15516 ID ADJ15516 standard; DNA; 20 BP.
XX AC ADJ15516;
XX
XX 20-MAY-2004 (first entry)
XX
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 66.
XX
XX human; ser; liver related homologue-1; LRH1, NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolemia;
XX gall stone; triglyceridemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cytosstatic; antiinflammatory;
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX
XX Homo sapiens.
XX OS Synthetic.

```

```

XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX
XX modified_base 1..5
XX
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX
XX modified_base 16..20
XX
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
XX Example 15; SEQ ID NO 66; 909pp; English.
XX
XX This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolemia, gall stones,
XX triglyceridemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cytostatic, antiinflammatory, antiarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This
XX oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX expression of the human LRH1 protein of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3023 TTGCAAGCAAGCTTTCC 3040
XX 2 TTACAGCAAGCTTTCC 19
XX
XX RESULT 2452
XX ADK78546 ID ADK78546 standard; DNA; 20 BP.

```

```

XX AC ADK78546;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5880.
XX KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KM infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 5880, 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2350 CCAAGATGATTAACATG 2367
XX DB 3 CCAAGATGATTAAGATG 20
XX
XX RESULT 2453
XX ADK79373
XX ID ADK79373 standard; DNA; 20 BP.
XX AC ADK79373;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6707.
XX KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KM diabetic neuropathy; arthritic pain; migraine headache;
XX KM infantile epilepsy; ataxia; ss.

```

```

XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI; 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 6707; 417pp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.4e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2351 CAAAGATGATTAACATGA 2368
XX DB 1 CAAAGATGATTAAGATCA 18
XX
XX RESULT 2454
XX ADP20520/c
XX ID ADP20520 standard; DNA; 20 BP.
XX AC ADP20520;
XX DT 26-AUG-2004 (first entry)
XX DE Transcription factor AP-2 antisense oligonucleotide seqid 67.
XX KM cytostatic; AP-2-inhibitor-Alpha; AP-2 alpha; AP-2 alpha modulator;
XX KM AP-2 alpha associated disorder; hyperproliferative disorder; human;
XX KM transcription factor; antisense oligonucleotide; antisense technology;
XX KM ss.
XX OS Homo sapiens.
XX PN US2004109848-A1.
XX PD 10-JUN-2004.
XX PF 09-DEC-2002; 2002US-00315962.

```

PR 09-DEC-2002; 2002US-00315962.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Bennett CF, Dean NM, Freier SM, Dobie KM;  
XX WPI; 2004-440306/41.  
XX  
XX New compounds targeted to nucleic acid molecules encoding AP-2 alpha and  
PT inhibits the expression of AP-2 alpha, useful for treating AP-2 alpha-  
PT associated disease or condition, particularly a hyperproliferative  
PT disorder.  
XX  
XX Example 15; SEQ ID NO 67; 58pp; English.  
XX  
XX The invention describes a compound (I) 8-80 nucleobases in length  
CC targeted to a nucleic acid molecule encoding AP-2 alpha. The compound  
CC specifically hybridizes with a nucleic acid molecule encoding AP-2 alpha  
CC (19868 bp, SEQ ID NO: 4), and inhibits the expression of AP-2 alpha. Also  
CC described are: inhibiting the expression of AP-2 alpha in cells or tissues  
CC comprising contacting the cells or tissues with (I); screening for a  
CC modulator of AP-2 alpha by contacting a preferred target segment of a  
CC nucleic acid molecule encoding AP-2 alpha with one or more candidate  
CC modulators of AP-2 alpha, and identifying one or more modulators of AP-2  
CC diagnostic method for identifying a disease state; and a kit or assay  
CC device comprising (I). The compound is useful for treating an animal  
CC having a disease or condition associated with AP-2 alpha, particularly a  
CC hyperproliferative disorder. The compounds may be used for diagnostics,  
CC therapeutic prophylaxis and as research reagents; or as tools in  
CC differential and/or combinatorial analyses to elucidate expression  
CC patterns of a portion or the entire complement of genes expressed within  
CC cells and tissues. This sequence represents a human transcription factor  
CC AP-2 antisense oligonucleotide.  
XX  
XX Sequence 20 BP; 5 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
SQ

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 177 CTGCTGCTGCTGCTGCTG 194  
DB 19 CTGCTGCTGCTGCTGCTG 2

RESULT 2455  
ADP27248  
ID ADP27248 standard; DNA; 20 BP.  
XX  
XX ADP27248;  
AC  
XX  
XX 26-AUG-2004 (first entry)  
DT  
XX  
XX Human MMP11 DNA antisense oligonucleotide target region #2.  
DE  
XX  
XX Human; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;  
KM phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
KM 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.  
XX  
XX Homo sapiens.  
OS  
XX  
XX US2004110152-A1.  
PN  
XX  
XX 10-JUN-2004.  
PD  
XX  
XX 10-DEC-2002; 2002US-00316755.  
PF  
XX  
XX 10-DEC-2002; 2002US-00316755.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Baker BF, Cowseert LM;  
PI

XX  
XX WPI; 2004-440341/41.  
DR  
XX  
XX New oligonucleotide compound that inhibits expression of matrix  
PT metalloproteinase 11, useful for preparing a composition for treating  
PT hyperproliferative disorder, e.g., cancer.  
XX  
XX Example 16; SEQ ID NO 174; 76pp; English.  
XX  
XX The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound  
CC is an antisense oligonucleotide that specifically hybridizes with the  
CC nucleic acid and inhibits expression of the polypeptide. The antisense  
CC oligonucleotide comprises at least one modified internucleoside linkage  
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,  
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified  
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are  
CC useful for modulating the expression of the MMP11 polypeptide and in  
CC preparation of a composition for treating hyperproliferative disorders,  
CC e.g. cancer. This sequence represents a human MMP11 DNA antisense  
CC oligonucleotide target region of the invention.  
XX  
XX Sequence 20 BP; 1 A; 8 C; 6 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 175 CGCTGCTGCTGCTGCTGC 192  
DB 3 CGATGCTGCTGCTGCTGC 20

RESULT 2456  
ADP27093/C  
ID ADP27093 standard; DNA; 20 BP.  
XX  
XX ADP27093;  
AC  
XX  
XX 26-AUG-2004 (first entry)  
DT  
XX  
XX Human matrix metalloproteinase 11 DNA antisense oligonucleotide #2.  
DE  
XX  
XX Human; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide;  
KM phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;  
KM 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.  
XX  
XX Homo sapiens.  
OS  
XX  
XX US2004110152-A1.  
PN  
XX  
XX 10-JUN-2004.  
PD  
XX  
XX 10-DEC-2002; 2002US-00316755.  
PF  
XX  
XX 10-DEC-2002; 2002US-00316755.  
PR  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Baker BF, Cowseert LM;  
PI  
XX  
XX WPI; 2004-440341/41.  
DR  
XX  
XX New oligonucleotide compound that inhibits expression of matrix  
PT metalloproteinase 11, useful for preparing a composition for treating  
PT hyperproliferative disorder, e.g., cancer.  
XX  
XX Example 15; SEQ ID NO 19; 76pp; English.  
XX  
XX The invention relates to a compound targeted to a nucleic acid molecule  
CC encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound  
CC is an antisense oligonucleotide that specifically hybridizes with the  
CC nucleic acid and inhibits expression of the polypeptide. The antisense

CC oligonucleotide comprises at least one modified internucleoside linkage  
CC i.e. a phosphorothioate linkage, at least one modified sugar moiety,  
CC preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified  
CC nucleobase comprising a 5-methylcytosine. The antisense compounds are  
CC useful for modulating the expression of the MMP11 polypeptide and in  
CC preparation of a composition for treating hyperproliferative disorders,  
CC e.g. cancer. This sequence represents an antisense oligonucleotide  
CC targeted to DNA encoding the human MMP11 polypeptide of the invention.  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 175 CGCTGCTGCTGCTGCTG 192  
Db 18 CGATGCTGCTGCTGCTGC 1  
RESULT 2457  
ABK70314/c  
ID ABK70314 standard; DNA; 21 BP.  
XX  
AC ABK70314;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Synthetic antisense IGFBP-2-oligodeoxynucleotide (ODN) #2.  
XX  
KM Hormone-regulated cancer; antisense oligonucleotide; IGFBP-2;  
KM insulin-like growth factor binding protein-2; hormone-regulated tumour;  
KM breast cancer; prostate cancer; IGF-1-sensitive cancer; apoptosis;  
KM hormone-responsive cancer; hormonal withdrawal; oligodeoxynucleotide;  
KM ODN; endocrine tumour therapy; ss.  
XX  
OS Synthetic.  
XX  
PN WO200222642-A1.  
XX  
PD 21-MAR-2002.  
XX  
PF 13-SEP-2001; 2001WO-US028748.  
XX  
PR 14-SEP-2000; 2000US-0232641P.  
XX  
PA (UYBR-) UNIV BRITISH COLUMBIA.  
XX  
PI Gleave M, Satoshi K, Nelson C, Rennie PS;  
XX  
DR WPI; 2002-339861/37.  
XX  
PT Composition for treating hormone-regulated cancer, particularly of  
PT prostate or breast, comprises oligonucleotide antisense to insulin-like  
PT growth factor binding protein-2.  
XX  
PS Claim 3; Page 12; 36pp; English.  
XX  
CC The present invention relates to a new composition for treating hormone-  
CC regulated cancer. The composition comprises an antisense oligonucleotide  
CC that inhibits expression of IGFBP-2 (insulin-like growth factor binding  
CC protein-2). The molecules of the invention are used to delay progression  
CC of hormone-regulated tumours, particularly of breast or prostate, to the  
CC hormone-independent state, to delay metastatic progression to the bone of  
CC IGF-1-sensitive cancers and to treat hormone-responsive cancers by  
CC inducing apoptosis, after hormonal withdrawal. The present nucleic acid  
CC sequence represents one of a collection (ABK70313-ABK70375) of antisense  
CC IGFBP-2-oligodeoxynucleotides (ODN) that were used in the invention for  
CC prostate and other endocrine tumour therapy  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTACTCG 4  
RESULT 2458  
ABK70358/c  
ID ABK70358 standard; DNA; 21 BP.  
XX  
AC ABK70358;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Synthetic antisense IGFBP-2-oligodeoxynucleotide (ODN) #46.  
XX  
KM Hormone-regulated cancer; antisense oligonucleotide; IGFBP-2;  
KM insulin-like growth factor binding protein-2; hormone-regulated tumour;  
KM breast cancer; prostate cancer; IGF-1-sensitive cancer; apoptosis;  
KM hormone-responsive cancer; hormonal withdrawal; oligodeoxynucleotide;  
KM ODN; endocrine tumour therapy; ss.  
XX  
OS Synthetic.  
XX  
PN WO200222642-A1.  
XX  
PD 21-MAR-2002.  
XX  
PF 13-SEP-2001; 2001WO-US028748.  
XX  
PR 14-SEP-2000; 2000US-0232641P.  
XX  
PA (UYBR-) UNIV BRITISH COLUMBIA.  
XX  
PI Gleave M, Satoshi K, Nelson C, Rennie PS;  
XX  
DR WPI; 2002-339861/37.  
XX  
PT Composition for treating hormone-regulated cancer, particularly of  
PT prostate or breast, comprises oligonucleotide antisense to insulin-like  
PT growth factor binding protein-2.  
XX  
PS Claim 3; Page 13; 36pp; English.  
XX  
CC The present invention relates to a new composition for treating hormone-  
CC regulated cancer. The composition comprises an antisense oligonucleotide  
CC that inhibits expression of IGFBP-2 (insulin-like growth factor binding  
CC protein-2). The molecules of the invention are used to delay progression  
CC of hormone-regulated tumours, particularly of breast or prostate, to the  
CC hormone-independent state, to delay metastatic progression to the bone of  
CC IGF-1-sensitive cancers and to treat hormone-responsive cancers by  
CC inducing apoptosis, after hormonal withdrawal. The present nucleic acid  
CC sequence represents one of a collection (ABK70313-ABK70375) of antisense  
CC IGFBP-2-oligodeoxynucleotides (ODN) that were used in the invention for  
CC prostate and other endocrine tumour therapy  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTACTCG 4  
RESULT 2459  
AAV57641  
ID AAV57641 standard; DNA; 21 BP.  
XX

Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTACTCG 4  
RESULT 2458  
ABK70358/c  
ID ABK70358 standard; DNA; 21 BP.  
XX  
AC ABK70358;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Synthetic antisense IGFBP-2-oligodeoxynucleotide (ODN) #46.  
XX  
KM Hormone-regulated cancer; antisense oligonucleotide; IGFBP-2;  
KM insulin-like growth factor binding protein-2; hormone-regulated tumour;  
KM breast cancer; prostate cancer; IGF-1-sensitive cancer; apoptosis;  
KM hormone-responsive cancer; hormonal withdrawal; oligodeoxynucleotide;  
KM ODN; endocrine tumour therapy; ss.  
XX  
OS Synthetic.  
XX  
PN WO200222642-A1.  
XX  
PD 21-MAR-2002.  
XX  
PF 13-SEP-2001; 2001WO-US028748.  
XX  
PR 14-SEP-2000; 2000US-0232641P.  
XX  
PA (UYBR-) UNIV BRITISH COLUMBIA.  
XX  
PI Gleave M, Satoshi K, Nelson C, Rennie PS;  
XX  
DR WPI; 2002-339861/37.  
XX  
PT Composition for treating hormone-regulated cancer, particularly of  
PT prostate or breast, comprises oligonucleotide antisense to insulin-like  
PT growth factor binding protein-2.  
XX  
PS Claim 3; Page 13; 36pp; English.  
XX  
CC The present invention relates to a new composition for treating hormone-  
CC regulated cancer. The composition comprises an antisense oligonucleotide  
CC that inhibits expression of IGFBP-2 (insulin-like growth factor binding  
CC protein-2). The molecules of the invention are used to delay progression  
CC of hormone-regulated tumours, particularly of breast or prostate, to the  
CC hormone-independent state, to delay metastatic progression to the bone of  
CC IGF-1-sensitive cancers and to treat hormone-responsive cancers by  
CC inducing apoptosis, after hormonal withdrawal. The present nucleic acid  
CC sequence represents one of a collection (ABK70313-ABK70375) of antisense  
CC IGFBP-2-oligodeoxynucleotides (ODN) that were used in the invention for  
CC prostate and other endocrine tumour therapy  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 1.4e+03;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTACTCG 4  
RESULT 2459  
AAV57641  
ID AAV57641 standard; DNA; 21 BP.  
XX

```

AC  AAV57641;
XX
XX  27-NOV-1998 (first entry)
XX
XX  Exon 4 of an ENaC subunit amplifying forward primer B-5.
XX
XX  Epithelial sodium channel; ENaC; mutation; pathological condition;
XX  ion transport; water retention; blood pressure; metabolic acidosis;
XX  chronic respiratory disease; inflammation; human; PCR primer; ss.
XX
XX  Synthetic.
OS  Homo sapiens.
XX  MO9840516-A1.
XX  17-SEP-1998.
XX
XX  11-MAR-1998; 98WO-US004681.
XX
XX  11-MAR-1997; 97US-0040171P.
XX
XX  (UYVA ) UNIV YALE.
XX
XX  Lifton RP, Chang SS, Rossier BC;
XX
XX  WPI; 1998-506740/43.
XX
XX  Determination of presence of mutation conferring pathological condition
XX  mediated by altered ion transport - comprises analysing sample for
XX  presence of mutation of potassium ion channel gene, ENaC, or in its
XX  encoded protein.
XX
XX  Example 1; Page 38; 56pp; English.
XX
XX  Sequences shown in AAV57601 to AAV57686 represent primers used for the
XX  PCR amplification of the exons of the different subunits of the human
XX  epithelial sodium channel (ENaC) gene. This is used in the method of the
XX  invention of determining the presence or absence of a mutation conferring
XX  a pathological condition mediated by altered ion transport. The method
XX  comprises analysing a nucleic acid sample, or protein sample, for the
XX  presence of a mutation in the ENaC gene, or in its encoded protein. A
XX  vector containing a nucleic acid encoding a human altered variant of the
XX  ENaC protein can be used to transform host cells to produce an altered
XX  variant of an ENaC protein. The protein can be used to identify agents
XX  that effect ion transport. The agonists can be used to treat pathological
XX  conditions resulting from abnormal ion transport, such as water
XX  retention, increased blood pressure, chronic respiratory and metabolic
XX  acidosis and inflammation
XX
XX  Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 171 CCGCGCTGCTGCTGCTGCTG 191
Db 1 CCGCGCTGCTGCTGCTGCTG 21
RESULT 2460
AAZ26303/c
ID AAZ26303 standard; DNA; 21 BP.
XX
XX  AAZ26303;
XX
XX  30-NOV-1999 (first entry)
XX
XX  Human polymorphic region 492.
XX
XX  Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
XX  cell viability; loss of heterozygosity; precancerous condition; ASI;
XX  allele specific inhibitor; somatic cell; diagnosis; prevention;

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XX  atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
XX  dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
XX  graft versus host disease; malignant cell removal; bone marrow; ss.
XX
XX  Homo sapiens.
XX
XX  MO9841648-A2.
XX
XX  24-SEP-1998.
XX
XX  19-MAR-1998; 98WO-US005419.
XX
XX  20-MAR-1997; 97US-0041057P.
XX
XX  (VAR1-) VAR1GENICS INC.
XX
XX  Housman D, Ledley FD, Stanton VP;
XX
XX  WPI; 1998-521232/44.
XX
XX  Identifying target genes for allele-specific drugs - used for diagnosis,
XX  prevention and treatment of, e.g. cancer; atherosclerotic plaque,
XX  dysplastic lesions, endometriosis or graft versus host disease.
XX
XX  Disclosure; Fig 7; 605pp; English.
XX
XX  This invention describes a novel method for identifying an inhibitor
XX  potentially useful for treatment of cancer, where the inhibitor is active
XX  on a gene vital for cell growth or viability, and where the gene is
XX  subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
XX  used for preventing the development of cancer in a patient having a
XX  precancerous condition, by administering to the patient a first allele
XX  specific inhibitor (ASI) targeted to an allele of a first essential gene
XX  present in cells of the precancerous condition, where the normal somatic
XX  cells of the patient are heterozygous for the first gene, the inhibitor
XX  is active on at least one but less than all allelic forms of the gene
XX  present in a population and targets only one allelic form present in the
XX  normal somatic cells, and the first gene. The products and methods can be
XX  used in the diagnosis, prevention and treatment of LOH disorders, e.g.
XX  cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
XX  lesions, benign tumours, endometriosis, polycystic kidney disease, and
XX  graft versus host disease. The method can also be used to remove
XX  malignant cells from bone marrow transplants. AAZ25812-226825 represent
XX  human polymorphic sites described in the method of the invention
XX
XX  Sequence 21 BP; 2 A; 7 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 99 AGCCGAGAGCCGCCACCG 119
Db 21 AGCCGAGAGCGGCTGCTCCACG 1
RESULT 2461
AAZ35653/c
ID AAZ35653 standard; DNA; 21 BP.
XX
XX  AAZ35653;
XX
XX  09-JUL-1999 (first entry)
XX
XX  PCR primer used to amplify human heparanase cDNA.
XX
XX  Heparanase; hpa; modulator; heparin-binding growth factor;
XX  cellular response; cytokine; cell interaction; plasma lipoprotein;
XX  cellular susceptibility; infection; disintegration;
XX  neurodegenerative plaque; wound healing; angiogenesis; restenosis;
XX  atherosclerosis; inflammation; neurodegenerative disease; neutralise;
XX  plasma heparin; micrometastasis; autoimmune lesion; renal failure;
XX  PCR primer; ss.

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XX OS Synthetic.
XX PN WO9911798-A1.
XX XX 11-MAR-1999.
XX PD
XX PF 31-AUG-1998; 98WO-US017954.
XX PR 02-SEP-1997; 97US-00922170.
XX PR 02-JUL-1998; 98US-00109386.
XX PA (INSI-) INSIGHT STRATEGY & MARKETING LTD.
XX PA (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
XX PA (FRIE/) FRIEDMAN M M.
XX PI Pecker I, Vlodavsky I, Feinstein E;
XX DR WPI, 1999-302255/25.
XX PT New human polynucleotide useful for treating angiogenesis, restenosis,
XX PT and inflammation.
XX PS
XX XX Example 7; Page 30; 63pp; English.
XX CC The specification describes a polypeptide having heparanase (hpa)
XX CC activity. The recombinant protein is used as a modulator of heparin-
XX CC binding growth factors, cellular responses to heparin-binding growth
XX CC factors and cytokines, cell interaction with plasma lipoproteins,
XX CC cellular susceptibility to viral, protozoal and bacterial infections or
XX CC disintegration of neurodegenerative plaques. Heparanase may be useful for
XX CC conditions such as wound healing, angiogenesis, restenosis,
XX CC atherosclerosis, inflammation, neurodegenerative diseases, and viral
XX CC infections. Mammalian heparanase can be used to neutralize plasma
XX CC heparin, and anti-heparanase antibodies may be applied for
XX CC immunodetection and diagnosis of micrometastases, autoimmune lesions, and
XX CC renal failure in biopsy specimens, plasma samples, and body fluids. The
XX CC present PCR primer was used to amplify hpa cDNA, in the course of the
XX CC invention.
XX SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Db 177 CTGCTGCTGCTGCTGCTGCG 197
21 CTGATGCTGCTGCTGCTGCGG 1
RESULT 2462
AAH75055/C
ID AAH75055 standard; DNA; 21 BP.
XX AC AAH75055;
XX DT 15-JAN-2001 (first entry)
XX DE PCR primer hpl-629 used to amplify human cDNA encoding heparanase.
XX XX
XX KM Human; heparanase; gene therapy; tumour; inflammation; autoimmunity;
XX KM heparin-binding growth factor; cytokine; neurodegenerative plaque;
XX KM wound healing; infection; burn; angiogenesis; restenosis;
XX KM atherosclerosis; inflammation; neurodegenerative disease;
XX KM Gerstmann-Strausler Syndrome; Creutzfeldt-Jakob disease; PCR primer; ss.
XX OS Homo sapiens.
XX XX
XX PN WO200052178-A1.
XX PD 08-SEP-2000.

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PF 14-FEB-2000; 2000WO-US003542.
XX PR 01-MAR-1999; 99US-00258892.
XX XX
XX PA (INSI-) INSIGHT STRATEGY & MARKETING LTD.
XX PA (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
XX PA (FRIE/) FRIEDMAN M M.
XX PI Pecker I, Vlodavsky I, Feinstein E;
XX DR WPI, 2000-579289/54.
XX PT New polynucleotides encoding a polypeptide having heparanase activity,
XX PT useful in wound healing and in gene therapy, particularly in treating
XX PT tumor, inflammation, autoimmunity, neurodegenerative diseases.
XX PS
XX XX Example 6; Page 53; 152pp; English.
XX CC The present PCR primer was used to amplify a human cDNA sequence, which
XX CC encoded a protein with heparanase catalytic activity. The heparanase
XX CC (hpa) polynucleotide is useful in gene therapy, particularly in treating
XX CC tumour, inflammation or autoimmunity. Particularly, the polynucleotide is
XX CC useful in modulating the bioavailability of heparin-binding growth
XX CC factors, cellular responses to heparin-binding growth factors (e.g. bFGF)
XX CC and cytokines (e.g. interleukin (IL)-8), cell interaction with plasma
XX CC lipoproteins, cellular susceptibility to certain viral and some bacterial
XX CC and protozoal infections, or disintegration of neurodegenerative plaques.
XX CC The polynucleotide is also useful in wound healing (e.g. thermal,
XX CC chemical or radiation burns), and in the treatment of angiogenesis,
XX CC restenosis, atherosclerosis, inflammation, neurodegenerative diseases
XX CC (Gerstmann-Strausler Syndrome or Creutzfeldt-Jakob disease), and some
XX CC viral, bacterial or protozoal infections.
XX SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Db 177 CTGCTGCTGCTGCTGCTGCG 197
21 CTGATGCTGCTGCTGCTGCGG 1
RESULT 2463
AAH28092
ID AAH28092 standard; DNA; 21 BP.
XX AC AAH28092;
XX DT 05-SEP-2001 (first entry)
XX DE PCR primer for human norepinephrine transporter gene exon 2.
XX XX
XX KM Norepinephrine transporter; orthostatic intolerance; gene therapy;
XX KM mental illness; hypertension; heart disease; stimulant abuse; cocaine;
XX KM amphetamine abuse; PCR primer; ss.
XX OS Homo sapiens.
XX XX
XX PN WO200148246-A1.
XX PD 05-JUL-2001.
XX XX
XX PF 28-DEC-2000; 2000WO-US035491.
XX PR 29-DEC-1999; 99US-0173682P.
XX PR 11-JAN-2000; 2000US-0175456P.
XX XX
XX PA (UYVA-) UNITV VANDERBILT.
XX PI Robertson D, Blakely RD,
XX XX

```

DR WPI; 2001-425681/45.  
XX Screening for susceptibility to sub-optimal norepinephrine transport,  
PT particularly orthostatic intolerance in a subject by detecting a  
PT polymorphism of norepinephrine transporter gene.  
XX  
PS Example; Page 66; 133bp; English.  
XX PCR primers AAH28091-92 were used to amplify an exon of the human  
CC norepinephrine transporter. The specification a method for screening for  
CC susceptibility to sub-optimal norepinephrine transport in a subject. The  
CC method comprises obtaining a biological sample from the subject and  
CC detecting a polymorphism of a norepinephrine transporter gene in the  
CC sample from the subject, the presence of the polymorphism indicating the  
CC susceptibility of the subject to sub-optimal norepinephrine transport.  
CC The method is useful for screening for susceptibility of a subject to  
CC orthostatic intolerance. Norepinephrine transporter genes are useful for  
CC gene therapy for modulating norepinephrine transport in a target cell and  
CC treating susceptibility to impaired norepinephrine transporter function,  
CC orthostatic intolerance or other relevant diseases in humans and animals  
CC such as mental illness, hypertension, heart disease, psycho stimulant  
CC abuse e.g. cocaine or amphetamine abuse  
XX  
SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+03;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2632 CTTTGAAGTCCCACTGAG 2652  
Db 1 CCTAGATCTCACCACGTGAG 21  
XX  
RESULT 2464.  
ABK70370/C  
ID ABK70370 standard; DNA; 21 BP.  
XX  
AC ABK70370;  
XX  
DT 15-JUL-2002 (first entry)  
XX  
DE Synthetic antisense IGFBP-2-oligodeoxynucleotide (ODN) #58.  
XX  
XX Hormone-regulated cancer; antisense oligonucleotide; IGFBP-2;  
KM insulin-like growth factor binding protein-2; hormone-regulated tumour;  
KM breast cancer; prostate cancer; IGF-1-sensitive cancer; apoptosis;  
KM hormone-responsive cancer; hormonal withdrawal; oligodeoxynucleotide;  
KM ODN; endocrine tumour therapy; ss.  
XX  
OS Synthetic.  
XX  
PN WO200222642-A1.  
XX  
PD 21-MAR-2002.  
XX  
PF 13-SEP-2001; 2001WO-US028748.  
XX  
PR 14-SEP-2000; 2000US-0232641P.  
XX  
PA (UYBR-) UNIV BRITISH COLUMBIA.  
XX  
PI Gleave M, Satoshi K, Nelson C, Rennie PS;  
XX  
XX WPI; 2002-339861/37.  
XX  
XX Composition for treating hormone-regulated cancer, particularly of  
PT prostate or breast, comprises oligonucleotide antisense to insulin-like  
PT growth factor binding protein-2.  
XX  
PS Example 1; Page 13; 36bp; English.  
XX  
CC The present invention relates to a new composition for treating hormone-

CC regulated cancer. The composition comprises an antisense oligonucleotide  
CC that inhibits expression of IGFBP-2 (insulin-like growth factor binding  
CC protein-2). The molecules of the invention are used to delay progression  
CC of hormone-regulated tumours, particularly of breast or prostate, to the  
CC hormone-independent state, to delay metastatic progression to the bone of  
CC IGF-1-sensitive cancers and to treat hormone-responsive cancers by  
CC inducing apoptosis, after hormonal withdrawal. The present nucleic acid  
CC sequence represents one of a collection (ABK70313-ABK70375) of antisense  
CC IGFBP-2-oligodeoxynucleotides (ODN) that were used in the invention for  
CC prostate and other endocrine tumour therapy  
XX  
SQ Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+03;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 181 TGCTGCTGCTGCTGCGGCG 201  
Db 21 TGCTGCTGCTGCTGCTGCGG 1  
XX  
RESULT 2465  
ABX94136  
ID ABX94136 standard; DNA; 21 BP.  
XX  
AC ABX94136;  
XX  
DT 05-JUN-2003 (first entry)  
XX  
DE PCR primer ZC37986 for cDNA encoding human testis protein, Zs1986A.  
XX  
XX Human; testis protein; Zs1986A; gonadal development; pubertal change;  
KM fertility; neuralgia associated with reproductive phenomena; impotency;  
KM male sexual dysfunction; prostate cancer; testicular cancer;  
KM colon cancer; gastrointestinal mobility; gastrointestinal dysfunction;  
KM cellular metabolism; cellular function; cytosstatic; antiinfertility; PCR;  
KM primer; ss.  
XX  
XX Homo sapiens.  
XX  
PN US2002192777-A1.  
XX  
PD 19-DEC-2002.  
XX  
XX 01-NOV-2001; 2001US-00000639.  
XX  
PR 01-NOV-2000; 2000US-0245070P.  
XX  
PA (SHEP/) SHEPPARD P O.  
PA (VUTO/) VU T O.  
PA (FELD/) FELDBAUS A L.  
PA (HALD/) HALDEMAN B A.  
XX  
PI Sheppard PO, Vu TO, Feldhaus AL, Haldeman BA;  
XX  
XX WPI; 2003-352712/33.  
XX  
XX New Zs1986 polypeptides and nucleic acid molecules useful for treating  
PT disorder associated with gonadal development, fertility, male sexual  
PT dysfunction, impotency, prostate/testicular/colon cancer,  
PT gastrointestinal mobility.  
XX  
PS Example 3; Page 44; 46bp; English.  
XX  
XX The present invention relates to the isolation of a novel human testis  
CC protein designated Zs1986. Two isoforms of Zs1986 (Zs1986A and Zs1986B),  
CC and the polynucleotide sequences encoding them are identified. The gene  
CC encoding human Zs1986 maps to chromosome 3p21. The Zs1986 polypeptides,  
CC antibodies to Zs1986, and Zs1986 polynucleotide sequences are useful for  
CC treating disorders associated with gonadal development, pubertal changes,  
CC fertility, neuralgia associated with reproductive phenomena, male sexual  
CC dysfunction, impotency, prostate cancer, testicular cancer, colon cancer,





```
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
SQ Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;
Query Match 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 177 CTGCTGCTGCTGCTGCTGCG 197
Db 21 CTGATGCTGCTGCTGCTGCG 1

RESULT 2468
ADM48723/c
ID ADM48723 standard; DNA: 21 BP.
AC ADM48723;
XX
XX 03-JUN-2004 (first entry)
XX
DE Human hpa DNA amplifying PCR primer, hpl-629.
XX
XX Transgenic animal; heparanase; cancer; viral infection; restenosis;
XX neurodegenerative disease; atherosclerosis; pulmonary disorder; hpa; PCR;
XX primer; human; ss.
XX
XX Homo sapiens.
XX
XX US2003217375-A1.
XX
XX 20-NOV-2003.
XX
XX 24-FEB-2003; 2003US-00371218.
XX
XX 31-AUG-1998; 98WO-US017954.
XX
XX 01-MAR-1999; 99US-00258892.
XX
XX 06-FEB-2001; 2001US-00776874.
XX
XX 19-NOV-2001; 2001US-00988113.
XX
XX (ZCHA/) ZCHARIA E.
XX (VL0D/) VLODAVSKY I.
XX (METZ/) METZGER S.
XX (PECK/) PECKER I.
XX (ILAN/) ILAN N.
XX (CHAU/) CHAJEK-SHAUL T.
XX (GOLD/) GOLDSHMIDT O.
XX
XX Zcharia E, Vlodavsky I, Metzger S, Pecker I, Ilan N;
XX Chajek-Shaul T, Goldshmidt O;
XX
XX WPI; 2004-021918/02.
XX
XX New transgenic non-human animal expressing heparinase, useful as models
XX for human disease, such as cancers, viral infection, neurodegenerative
XX diseases, restenosis, atherosclerosis and pulmonary disorders.
XX
XX Example 6; SEQ ID NO 17; 106pp; English.
XX
XX The present invention relates to a transgenic non-human animal whose
XX genome comprises an exogenous polynucleotide sequence, including a
XX promoter active in tissues of the non-human, a region encoding a human
XX heparanase, where the promoter and the region encoding human heparanase
XX are operably linked in the exogenous polynucleotide such that human
XX heparanase is expressed in at least a portion of the cells of the non-
XX human animal. The methods and compositions of the present invention are
XX useful for the production of transgenic animals expressing heparanase, to
XX be used as models for human diseases such as cancers, viral infection,
XX restenosis, neurodegenerative diseases, atherosclerosis and pulmonary
XX disorders. The present sequence is human hpa DNA amplifying PCR primer
XX used in the exemplification of the invention.
XX
XX Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
```

```
Query Match 0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.5e+03;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 177 CTGCTGCTGCTGCTGCTGCG 197
Db 21 CTGATGCTGCTGCTGCTGCG 1

RESULT 2469
ADO33427/c
ID ADO33427 standard; DNA: 16 BP.
AC ADO33427;
XX
XX 12-AUG-2004 (first entry)
XX
XX Antisense 2'-MOE gapmer oligo targeted to human Apob - SEQ ID 875.
XX
XX Apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;
XX antilipemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytostatic; endocrine; vasotropic;
XX neuroprotective; noctropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
XX Von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
XX Homo sapiens.
XX
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..16
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Phosphorothioate backbone, bases 1-3 and
XX FT 14-16 2'-MOE wing bases, all cytidine residues are 5-
XX FT methylcytidines"
XX
XX WO2004044181-A2.
XX
XX 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX Example 59; SEQ ID NO 875; 483pp; English.
XX
XX The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
XX vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
XX endocrine, vasotropic, neuroprotective and noctropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal.
```

CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilized during treatment of  
 CC hyperlipoproteinemia, hyperlipidemia, hypercholesterolemia, a  
 CC cardiovascular disorder, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual atretic dwarfism, hypothyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapped oligo of the invention which is  
 CC targeted to human Apob RNA.

XX Sequence 16 BP; 2 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3251 TGGGAGGAGACTGAG 3266

Db 16 TGGGAGGAGACTGAG 1

RESULT 2470

ADR74944

ADR74944 standard; DNA; 16 BP.

ADR74944;

16-DEC-2004 (first entry)

Allele specific primer B for human stenosis marker hcv25963602.

Human; ss; PCR; primer; Allele specific primer; coronary stenosis;  
 angina; ischaemic chest pain; myocardial infarction;

sudden cardiac death; SNP; single nucleotide polymorphism.

Homo sapiens.

MO2004081186-A2.

23-SEP-2004.

10-MAR-2004; 2004WO-US007140.

10-MAR-2003; 2003US-0453050P.

30-APR-2003; 2003US-0466437P.

(APPL-) APPLERA CORP.

Cargill M, Devlin JJ, Luke MM;

WPI; 2004-668949/65.

Identifying an individual who has altered risk for developing stenosis

comprises detecting single nucleotide polymorphism (SNP), in the

individual's nucleic acids.

Claim 19; SEQ ID NO 68256; 146bp; English.

The invention relates to identifying an individual who has altered risk

for developing coronary stenosis comprising detecting a single nucleotide

polymorphism (SNP) in any one of the 67073 nucleotide sequences (not

given in the specification), in the individual's nucleic acids, where the

presence of the SNP is correlated with an altered risk for stenosis in

the individual. Also included are an isolated nucleic acid molecule

(comprising at least 8 contiguous nucleotides where one of the

nucleotides is an SNP as cited above, or their complement), an isolated

polypeptide comprising an amino acid sequence selected from any of the

666 amino acid sequences (not defined in the specification), an antibody

that specifically binds to the polypeptide (or its antigen-binding

fragment), an amplified polynucleotide containing the SNP as cited (where

CC the amplified polynucleotide is between about 16 and about 1,000  
 CC nucleotides in length), an isolated polynucleotide which specifically  
 CC hybridises to a nucleic acid molecule containing the SNP, a kit for  
 CC detecting a SNP in a nucleic acid, detecting a SNP in a nucleic acid  
 CC molecule, detecting a variant polypeptide and identifying an agent useful  
 CC in therapeutically or prophylactically treating stenosis. The detection  
 CC step of the method is carried out by a process selected from allele-  
 CC specific probe hybridisation, allele-specific primer extension, allele-  
 CC specific amplification, sequencing, 5' nuclease digestion, molecular  
 CC beacon assay, oligonucleotide ligation assay, size analysis, and single-  
 CC stranded conformation polymorphism. The method is useful for identifying  
 CC an individual who has altered risk for developing coronary stenosis,  
 CC which can lead to angina (ischaemic chest pain), myocardial infarction  
 CC and ultimately sudden cardiac death. The present sequence is an allele  
 CC specific primer for amplifying a SNP-containing region of a human marker  
 CC gene associated with stenosis. NOTE: SRO ID 1-67771 are not shown in the  
 CC specification but are provided on a CD-R named CU001510CDR which was not  
 CC supplied with the specification.

XX Sequence 16 BP; 4 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1509 CAGGAGCTGCTGACA 1524

Db 1 CAGGAGCTGCTGACA 16

RESULT 2471

AA146760

AA146760 standard; DNA; 17 BP.

AA146760;

08-AUG-2002 (first entry)

Antisense oligonucleotide.

Modified antisense oligonucleotide; antisense; HIV; cancer; infection;  
 cytostatic; virucide; anti-HIV; hepatotropic; anti-inflammatory;  
 phosphorothioate backbone; integrin; cell-cell adhesion receptor; ss.

Unidentified.

Key Location/Qualifiers

modified\_base 1..16

FT /tag= a

FT /mod\_base= OTHER

FT /note= "optionally phosphorothioate backbone"

EP1182206-A2.

27-FEB-2002.

07-NOV-1994; 2001EP-00124078.

12-NOV-1993; 93DE-04338704.

07-NOV-1994; 94EP-00117513.

(FAR) HOECHST AG.

Peymann A, Uhlmann E, Mag M, Kretschmar G, Heleberg M, Winkler I;

WPI; 2002-353922/39.

New nuclease-resistant oligonucleotides having modified non-terminal

pyrimidine nucleoside(s), useful e.g. for treating cancer or viral

diseases or as diagnostic reagents.

Claim 1; Page 16; 19pp; German.

CC The present invention relates to oligonucleotides having at least one non  
CC terminal pyrimidine nucleoside modified and additionally having the 5'-  
CC and/or 3'-terminal modified. These can be used in the treatment of viral  
CC infections, such as HIV, HSV-1, HSV-2, influenza virus, VSV, hepatitis B  
CC and papilloma viruses, cancer and diseases involving integrins and cell-  
CC cell adhesion receptors. The present sequence is an antisense  
CC oligonucleotide specifically excluded by the invention

XX Sequence 17 BP; 5 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2834 CACCACTTCTTCAC 2849

Db 1 CACCACTTCTTCAC 16

RESULT 2472

ABK57798

ID ABK57798 standard; RNA; 17 BP.

AC ABK57798;

DT 02-JUL-2002 (first entry)

XX Human CLCA1 gene enzymatic nucleic acid #2169.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiaesthetic;

XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;

XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;

XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;

XX acetylcytosteine.

XX Homo sapiens.

XX WO200211674-A2.

XX 14-FEB-2002.

XX 09-AUG-2001; 2001WO-US024970.

XX 09-AUG-2000; 2000US-0224383P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (SYNT) SYNTAX USA LLC.

XX (THOM/) THOMPSON J.

XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

XX Grupe A;

XX WPI; 2002-217145/27.

XX Enzymatic polynucleotide that down regulates expression of chloride

XX channel calcium activated gene, useful for treating Chronic obstructive

XX pulmonary disease (COPD), chronic bronchitis and asthma.

XX Claim 4; Page 136; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcytosteine and mucokinetic agents. The

CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention

XX Sequence 17 BP; 3 A; 10 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 1.2e+03;

Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 3083 CTCACAGACTCGCC 3098

Db 2 CUCACAGACUCCGCC 17

RESULT 2473

ABK57469

ID ABK57469 standard; RNA; 17 BP.

AC ABK57469;

DT 02-JUL-2002 (first entry)

XX Human CLCA1 gene enzymatic nucleic acid #1840.

XX Human; chloride channel calcium activated 1; CLCA1; ss; antiaesthetic;

XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;

XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;

XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;

XX acetylcytosteine.

XX Homo sapiens.

XX WO200211674-A2.

XX 14-FEB-2002.

XX 09-AUG-2001; 2001WO-US024970.

XX 09-AUG-2000; 2000US-0224383P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (SYNT) SYNTAX USA LLC.

XX (THOM/) THOMPSON J.

XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;

XX Grupe A;

XX WPI; 2002-217145/27.

XX Enzymatic polynucleotide that down regulates expression of chloride

XX channel calcium activated gene, useful for treating Chronic obstructive

XX pulmonary disease (COPD), chronic bronchitis and asthma.

XX Claim 4; Page 114; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcytosteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an

CC enzymatic nucleic acid molecule of the invention  
 XX Sequence 17 BP; 4 A; 9 C; 2 G; 0 T; 2 U; 0 Other;  
 SQ

Query Match 0.1%; Score 16; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 1.2e+03;  
 Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 3083 CTCACAGACTCCGCC 3098  
 1 CUCCACAGACUCCGCC 16

Db

RESULT 2474  
 AAD21079  
 ID AAD21079 standard; DNA; 18 BP.  
 XX  
 AC AAD21079;  
 XX  
 DT 15-JAN-2002 (first entry)  
 XX  
 DE Wnt3 RT-PCR primer #2 used in the method for modulating hair growth.  
 XX  
 KW Signal transduction; Wnt protein; dermal papilla; DP; beta-catenin;  
 KW GSK3beta kinase; genetic pattern baldness; hormonal disorder;  
 KW chemotherapy; anagen phase; hair growth promoter; RT-PCR primer; ss.  
 XX  
 OS unidentified.  
 XX  
 PN W0200174164-A1.  
 XX  
 PD 11-OCT-2001.  
 XX  
 PF 30-MAR-2001; 2001WO-US010164.  
 XX  
 PR 31-MAR-2000; 2000US-0193771P.  
 PR 12-JAN-2001; 2001US-0261690P.  
 XX  
 PA (GENO) GEN HOSPITAL CORP.  
 PI Kishimoto J, Burgess R, Morgan BA;  
 PT WPI; 2001-648492/74.  
 XX  
 PT Promoting or inhibiting hair growth in a subject by inducing or  
 PT mimicking, or inhibiting effect of Wnt-promoted signal transduction,  
 PT respectively.  
 XX  
 PS Disclosure; Page 22; 63pp; English.  
 XX  
 CC The present invention relates to promoting hair growth in a subject which  
 CC involves inducing or mimicking the effect of Wnt-promoted signal  
 CC transduction in a subject and inhibiting hair growth in a subject  
 CC involves inhibiting level of Wnt protein or inhibiting an effect of Wnt-  
 CC promoted signal transduction in a subject. The invention is used for  
 CC providing and maintaining dermal papilla (DP) cell graft which involves  
 CC culturing a DP cell from a subject under conditions that induce or mimic  
 CC the effect of Wnt-promoted signal transduction, thereby providing and  
 CC maintaining a DP cell graft. Preferably, the DP cell is cultured in the  
 CC presence of Wnt, its fragment or analogue; lithium chloride, beta-catenin  
 CC and/or Lef1, an agent which inhibits beta-catenin phosphorylation or  
 CC GSK3beta kinase, or an agent which promotes beta-catenin accumulation.  
 CC Hair growth is promoted in subject's scalp, or face e.g., beard and/or  
 CC mustache, or in conditions where subject suffers from genetic pattern  
 CC baldness, suffers from a hormonal disorder which decreases hair growth,  
 CC has received a treatment, e.g., radiation or chemotherapy, or a drug  
 CC which inhibits hair growth, or has had a surgical procedure, e.g., skin  
 CC graft, which is in need of hair growth. Hair growth is inhibited on the  
 CC subject's scalp, subject's face, e.g., beard and/or mustache, facial hair  
 CC growth, or eyebrow growth, back, legs, chest, armpits. Promoting hair  
 CC growth is useful for maintaining or promoting hair inductive activity.  
 CC Inhibiting hair growth is useful for maintaining or promoting anagen  
 CC phase gene expression in the subject's scalp, face e.g., upper lip and/or

CC chin. The present sequence is Wnt3 RT-PCR primer used in the method for  
 CC modulating hair growth  
 CC  
 XX Sequence 18 BP; 1 A; 6 C; 6 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 16; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+03;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGCGC 196  
 2 TGCTGCTGCTGCTGCGC 17

Db

RESULT 2475  
 AAS08838/C  
 ID AAS08838 standard; DNA; 20 BP.  
 XX  
 AC AAS08838;  
 XX  
 DT 26-SEP-2001 (first entry)  
 XX  
 DE Human PD-ABC form 2 DNA exon 15 5' splice site.  
 XX  
 KW PD-ATP-binding cassette; PD-ABC; chromosome 19p13.3; spleen; thymus; ds;  
 KW peripheral blood leukocyte; bone marrow; lymph node; dyslipidemia;  
 KW cardiovascular disorder; inflammatory disorder; abnormal calcium flux;  
 KW epilepsy; coronary artery disease; Tangier's disease; atherosclerosis;  
 KW familial high-density lipoprotein deficiency; fatty liver disease;  
 KW atherosclerosis; diabetes; insulin resistance; obesity; drug screening;  
 KW alcoholism; retinal degeneration; hypertension; vascular disease.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200153490-A1.  
 XX  
 PD 26-JUL-2001.  
 XX  
 PF 23-JAN-2001; 2001WO-US002191.  
 XX  
 PR 24-JAN-2000; 2000US-0177889P.  
 PR 30-JUN-2000; 2000US-0215405P.  
 XX  
 PA (WARN) WARNER LAMBERT CO.  
 PI Johns MA, Tafuri SR, Wang M;  
 PT WPI; 2001-442259/47.  
 XX  
 XX New Human PD-ABC DNA molecules and proteins for diagnosis and treatment  
 PT of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.  
 XX  
 PS Disclosure; Page 39; 77pp; English.  
 XX  
 CC The sequence represents a splice site within a DNA molecule encoding  
 CC human PD-ATP-binding cassette (PD-ABC) protein. PD-ABC maps to chromosome  
 CC 19p13.3 and is expressed in various tissues including spleen, thymus,  
 CC peripheral blood leukocytes, bone marrow and lymph nodes. The PD-ABC DNA  
 CC molecules and proteins are used to diagnose and treat cardiovascular  
 CC disorders, inflammatory disorders, dyslipidemia, epilepsy, diseases  
 CC related to abnormal calcium flux, coronary artery disease, Tangier's  
 CC disease, familial high-density lipoprotein deficiency, atherosclerosis,  
 CC diabetes, fatty liver disease, insulin resistance, obesity, alcoholism,  
 CC retinal degeneration, hypertension and vascular disease. The sequences  
 CC are also used in drug screening assays  
 XX

SO Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 16; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1713 CAGGCTGCGGAAAA 1728

Db 17 CAGGCTCTGCGGAAA 2

## RESULT 2476

AA08747/c standard; DNA; 20 BP.

AA08747;

26-SEP-2001 (first entry)

Human PD-ABC form 1 DNA exon 15 5' splice site.

PD-ABC-binding cassette; PD-ABC; chromosome 19p13.3; spleen; thymus; ds; peripheral blood leukocyte; bone marrow; lymph node; dyslipidaemia; cardiovascular disorder; inflammatory disorder; abnormal calcium flux; epilepsy; coronary artery disease; Tangier's disease; atherosclerosis; familial high-density lipoprotein deficiency; fatty liver disease; atherosclerosis; diabetes; insulin resistance; obesity; drug screening; alcoholism; retinal degeneration; hypertension; vascular disease.

Homo sapiens.

WO200153490-A1.

26-JUL-2001.

23-JAN-2001; 2001WO-US002191.

24-JAN-2000; 2000US-0177889P.

30-JUN-2000; 2000US-0215405P.

(WARN) WARNER LAMBERT CO.

Johns MA, Tafuri SR, Wang M;

WPI; 2001-442259/47.

New Human PD-ABC DNA molecules and proteins for diagnosis and treatment of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.

Disclosure; Page 37; 77pp; English.

The sequence represents a splice site within a DNA molecule encoding human PD-ABC-binding cassette (PD-ABC) protein. PD-ABC maps to chromosome 19p13.3 and is expressed in various tissues including spleen, thymus, peripheral blood leukocytes, bone marrow and lymph nodes. The PD-ABC DNA molecules and proteins are used to diagnose and treat cardiovascular disorders, inflammatory disorders, dyslipidaemia, epilepsy, diseases related to abnormal calcium flux, coronary artery disease, Tangier's disease, familial high-density lipoprotein deficiency, atherosclerosis, diabetes, fatty liver disease, insulin resistance, obesity, alcoholism, retinal degeneration, hypertension and vascular disease. The sequences are also used in drug screening assays

Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.5e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1713 CAGGCTCTGCGGAAA 1728

17 CAGGCTCTGCGGAAA 2

## RESULT 2477

AA072522 standard; DNA; 21 BP.

AA072522;

17-OCT-1997 (first entry)  
5-Cys-encoding oligonucleotide.

Streptavidin; mutagenesis; stabilisation; Stv-43; ss.

Synthetic.

WO9711183-A1.

27-MAR-1997.

10-SEP-1996; 96WO-US005169.

11-APR-1995; 95US-00420010.

(UYBO-) UNIV BOSTON.

Sano T, Cantor CR, Vajda S, Reznik GO, Smith CL, Pandori MW;

WPI; 1997-202890/18.

New streptavidin mutants - have increased stability or altered affinity for biotin.

Example 14; Page 33; 91pp; English.

Two 21-mer oligonucleotides (AA072522 and AA072523) were annealed and the resulting double-stranded DNA was ligated into the EcoRI and BamHI sites of the predigested DNA of a plasmid encoding residues 16 to 133 of streptavidin with lys at position 127. The gene was cloned into a bacterial expression vector and the mutated streptavidin expressed and purified. The mutant streptavidin forms heterotetramers in solution and with Phe at position 120, has a reduced biotin-binding affinity of less than about 10 power 8/M. It can be conjugated to other proteins and macromolecules, and also to solid supports through the sulphhydryl group on the cysteine residues

Sequence 21 BP; 4 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 16; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

178 TGCTGCTGCTGCTGCT 193

4 TGCTGCTGCTGCTGCT 19

## RESULT 2478

AA07330 standard; DNA; 21 BP.

AA07330;

18-NOV-2004 (revised)

06-JUN-2001 (first entry)

Human gene single nucleotide polymorphism #2091.

Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.

Homo sapiens. Undenified.

Key Location/Qualifiers  
11  
variation

/cag= a  
/standard\_name= "Single nucleotide polymorphism"

```

PN WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 2000WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, Mccarthy JU;
XX WPI; 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 191; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at various
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
XX in the specification. In particular, the method can be used in the
XX diagnosis of atherosclerosis, myocardial infarction, coronary heart
XX disease, stroke, peripheral vascular diseases, venous thromboembolism and
XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
XX useful in forensics, paternity testing, genetic analysis and phenotype
XX correlations to diseases. The present sequence is an example of one of
XX the human gene SNPs shown in the specification
XX
XX Revised record issued on 18-NOV-2004 : The variation feature was
XX incorrectly given a capital V
XX
XX Sequence 21 BP; 4 A; 6 C; 10 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 69 GCCAGGCGCCGAGGCG 84
XX
XX Db 2 GCCAGGCGCCGAGGCG 17
XX
XX RESULT 2479
XX AAH62665/C
XX ID AAH62665 standard; DNA; 21 BP.
XX
XX AAH62665;
XX
XX 09-SEP-2004 (revised)
XX 12-SEP-2001 (first entry)
XX
XX Glucosidase alpha acid polymorphism containing DNA fragment #566.
XX
XX Single nucleotide polymorphism; SNP; human; cancer; inflammation;
XX heart disease; paternity testing; forensic science; ds.
XX
XX Homo sapiens.
XX Undenclified.
XX
XX Key Location/Qualifiers
XX Variation 11
XX /+tag= a
XX /standard_name= "single nucleotide polymorphism"
XX
XX WO200138576-A2.

```

```

XX 31-MAY-2001.
XX
XX 17-NOV-2000; 2000WO-US031639.
XX
XX 24-NOV-1999; 99US-0167334P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
XX Cargill M, Ireland JS, Lander ES;
XX WPI; 2001-367705/38.
XX
XX New nucleic acid segments of the human genome, particularly from genes
XX including polymorphic sites, for phenotype correlation, forensics,
XX paternity testing, medicine and genetic analysis.
XX
XX Claim 1; Page 75; 80pp; English.
XX
XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which
XX contain single nucleotide polymorphisms (SNPs). A method is included in
XX the invention for analysing a nucleic acid sample, which consists of
XX determining the base occupying any one of the polymorphic sites given in
XX the SNP containing sequences. The nucleotide sequences can be used in the
XX diagnosis or monitoring of diseases, such as cancer, inflammation, heart
XX diseases, diseases of the cardiovascular system, and infection by
XX microorganisms. The oligonucleotides are also useful in the manufacture
XX of a medicament for the treatment or prophylaxis of the diseases, and as
XX applications such as phenotype correlation, forensics, paternity testing,
XX medicine and genetic analysis
XX
XX Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
XX Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 16; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2433 GAAGTCCCGAAGCCA 2448
XX
XX Db 18 GAAGTCCCGAAGCCA 3
XX
XX RESULT 2480
XX ACC50050/C
XX ID ACC50050 standard; DNA; 21 BP.
XX
XX ACC50050;
XX
XX 15-JUL-2003 (first entry)
XX
XX OTRX1 probe used during RNA analysis.
XX
XX Zinc finger protein; Antidiabetic; Neuroprotective; Nootropic;
XX Cytostatic; Antiarthritic; Antirheumatic; Anti-HIV; Ophthalmological;
XX Cerebroprotective; Vasotropic; gene therapy; Cell therapy; ZFP; PCR;
XX probe; ss.
XX
XX Synthetic.
XX
XX WO2003027247-A2.
XX
XX 03-APR-2003.
XX
XX 24-SEP-2002; 2002WO-US030413.
XX
XX 24-SEP-2001; 2001US-0324619P.
XX 21-MAR-2002; 2002US-0367252P.
XX 17-APR-2002; 2002US-0374176P.
XX
XX (SANG-) SANGAMO BIOSCIENCES INC.

```

PA (WOLF/) WOLFFE L.  
 XX  
 PI Wolffe AP, Moore M, Farries T, Collingwood T, Urnov F;  
 XX WPI; 2003-371916/35.  
 XX  
 PT Altering the state of differentiation in multipotent stem cells which may  
 PT be used in cell therapy applications, comprises administering one or more  
 PT engineered zinc finger proteins to the multipotent stem cells.  
 PS  
 XX Example 3; Page 74; 88pp; English.  
 XX  
 CC This invention relates to a method for altering the state of  
 CC differentiation in a cell or population of cells, which comprises of the  
 CC administration of one or more engineered zinc finger proteins (ZFPs) to  
 CC the cell or population of cells (the ZFPs alter the state of cellular  
 CC differentiation). The method is considered antidiabetic, neuroprotective,  
 CC neurotropic, cytoskeletal, antiarthritic, antirheumatic, anti-HIV,  
 CC cerebroprotective and vasotropic. The methods and compositions are useful  
 CC in modifying stem cells using ZFPs, and in facilitating processes such as  
 CC dedifferentiating stem cells, differentiating stem cells into the desired  
 CC phenotype, propagating stem cells and/or facilitating cloning. The  
 CC composition may also be used in cell therapy techniques. In tissue  
 CC engineering techniques, and in gene therapy. The method has the ability  
 CC to directly and specifically control core processes that direct stem cell  
 CC differentiation, to limit or eliminate uncontrolled massive over-  
 CC expression of a target protein to toxic levels, to direct stem cell  
 CC differentiation or dedifferentiation through epigenetic mechanisms, to  
 CC screen ZFP-TF libraries for ZFP-TFs that control differentiation, to  
 CC generate animal models of ZFP-TF expression and in vivo regulation of  
 CC stem cell differentiation. This sequence represents the a probe used  
 CC during RNA analysis during the engineering of zinc finger proteins  
 XX  
 SQ Sequence 21 BP; 6 A; 7 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 16; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+03;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 183 CTGCTGCTGCTGCGG 198  
 Db 20 CTGCTGCTGCTGCGG 5  
 RESULT 2481  
 ADR75516/c  
 ID ADR75516 standard; DNA; 19 BP.  
 XX  
 AC ADR75516;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1.  
 XX  
 KM antidiabetic; cardiast; vasotropic; antiarteriosclerotic; antidiabetic;  
 KM cytoskeletal; anticonvulsant; neurotropic; muscular; anti-HIV;  
 KM RNA interference; RNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological diseases; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 KM  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US007070.  
 XX  
 AC 07-MAR-2003; 2003US-0452682P.  
 PR

PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNT-) ALNTIAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemia, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetric 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (II): reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 5813 CTTCCGCTTCGTATGCGC 5831  
 Db 19 CTTCCGCTTCGTATGCGC 1  
 RESULT 2482  
 ADR78134/c  
 ID ADR78134 standard; DNA; 19 BP.  
 XX  
 AC ADR78134;  
 XX



DT	16-DEC-2004	(First entry)
DE	Human apolipoprotein B (ApoB) oligonucleotide seqid 2619.	
KW	antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;	
KW	cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;	
KW	RNA interference; iRNA; antisense technology; lipid metabolism;	
KW	cholesterol imbalance; dyslipidaemia hypercholesterolaemia;	
KW	coronary artery disease; CAD; coronary heart disease; CHD;	
KW	atherosclerosis; hepatic glucose production;	
KW	glucose-metabolism-related disorder; diabetes; cancer; breast cancer;	
KW	colon cancer; lung cancer; neurological disease; Huntington disease;	
KW	spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.	
OS	Homo sapiens.	
XX		
PN	WO2004080406-A2.	
XX		
PD	23-SEP-2004.	
XX		
PF	08-MAR-2004; 2004WO-US007070.	
XX		
PR	07-MAR-2003; 2003US-0452682P.	
PR	12-MAR-2003; 2003US-0454285P.	
PR	13-MAR-2003; 2003US-0454962P.	
PR	13-MAR-2003; 2003US-0455050P.	
PR	14-APR-2003; 2003US-0462894P.	
PR	17-APR-2003; 2003US-0463772P.	
PR	25-APR-2003; 2003US-0465655P.	
PR	25-APR-2003; 2003US-0465802P.	
PR	09-MAY-2003; 2003US-0469612P.	
PR	08-AUG-2003; 2003US-0493986P.	
PR	11-AUG-2003; 2003US-0494597P.	
PR	26-SEP-2003; 2003US-0506341P.	
PR	09-OCT-2003; 2003US-0510246P.	
PR	10-OCT-2003; 2003US-0510318P.	
PR	07-NOV-2003; 2003US-0518453P.	
XX		
XX		
PA	(A1NY-) A1NYIAM PHARM.	
PI	Manoharan M, Bumcrot D;	
XX		
DR	WPI; 2004-677362/66.	
XX		
PT	Interference RNA agent useful for treating dyslipidemias, coronary artery	
PT	disease, diabetes, cancer or neurological disease, comprises sense	
XX	sequence and antisense sequence which has specific modifications.	
XX		
PS	Example 5; SEQ ID NO 2619; 378pp; English.	
XX		
CC	The invention describes a RNA interference (iRNA) agent (I) comprising a	
CC	sense sequence and an antisense sequence, where the sense sequences have	
CC	one or more asymmetrical 2'-O-alkyl modifications, the antisense	
CC	sequences have one or more asymmetrical phosphorothioate modifications	
CC	and the antisense sequence targets a human gene sequence. Also described	
CC	are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100	
CC	levels or glucose-6-phosphatase levels in a subject; producing (I);	
CC	stabilising (I); involves selecting a sequence with activity and	
CC	introducing one or more asymmetrical modification in the sequence, where	
CC	the modification decreases nucleic acid sensitivity while not decreasing its	
CC	activity; a kit comprising (I) and instructions for its use; and a device	
CC	that can be dispense or administer a composition comprising (I). (I) is	
CC	useful for reducing apob-100 levels or glucose-6-phosphatase levels. (MI)	
CC	is useful for reducing apob-100 levels or glucose-6-phosphatase levels.	
CC	The subject is suffering from a disorder characterised by elevated or	
CC	otherwise unwanted expression of apob-100, elevated or otherwise unwanted	
CC	levels of cholesterol, and/or dysregulation of lipid metabolism. The	
CC	disorder is chosen from the HDL/LDL cholesterol imbalance,	
CC	dyslipidemias, hypercholesterolaemia, statin-resistant	
CC	hypercholesterolaemia, coronary artery disease (CAD), coronary heart	
CC	disease (CHD) and atherosclerosis. (I) is administered to a subject to	
CC	inhibit hepatic glucose production or for treating glucose-metabolism-	
CC	related disorder e.g. diabetes or type-2 diabetes. (I) is useful for	

[illegible]

CC complementary to a sequence immediately upstream of the poly(A) addition  
 CC site of beta-globin mRNA and was used in reverse transcription to  
 CC generate first strand cDNA from total RNA. The present sequence  
 CC represents a nested primer complementary to the region 27 nucleotides  
 CC upstream from AAV07086

XX Sequence 19 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3524 AGCCGAGAGTCAATCCTC 3542

Db 1 AGCCGAGAGTCAATGCTC 19

RESULT 2484  
 AAX84588/c  
 ID AAX84588 standard; DNA; 19 BP.

XX AAX84588;

XX 14-SEP-1999 (first entry)

DE Primer for G-protein conjugate-type receptor protein DNA sequence.

XX Guanosine triphosphate binding protein; signal transduction regulation;  
 KW G-protein conjugate-type receptor protein; learning difficulty; BG2;  
 KM muscarinic acetylcholine receptor; physiological function disorder;  
 KM blood pressure; digestion; sleep; therapy; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX MO9933978-A1.

XX 08-JUL-1999.

XX 25-DEC-1998; 98WO-JP005967.

XX 26-DEC-1997; 97JP-00361187.

XX (BANY) BANYU PHARM CO LTD.

XX Itadani H, Takimura T, Nakamura T, Ohta M;

XX WPI; 1999-419107/35.

PT GTP binding protein conjugate-type receptor protein for screening  
 PT candidate drugs for signal transduction modification.

XX Example 2; Page 24; 77bp; English.

CC This sequence is a PCR primer for DNA encoding the human guanosine  
 CC triphosphate binding protein (G-protein) conjugate-type receptor protein  
 CC (designated BG2) of the invention. BG2 is a member of the G-protein  
 CC conjugate-type receptor super family and shows significant homology to  
 CC other muscarinic acetylcholine receptors. BG2 can be used in a screening  
 CC method for identifying ligands binding to the BG2 receptor and for  
 CC compounds which are agonists or antagonists to the binding of ligands to  
 CC BG2 receptor, and which can be used for the regulation of signal  
 CC transduction, and thus for the prevention and treatment of memory and  
 CC learning difficulties and disorders of the control of physiological  
 CC functions such as blood pressure, digestion and sleep

XX Sequence 19 BP; 2 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 588 CTGAACATCAAGAGGGCA 606

Db 19 CTGAACATCAAGAGGGCA 1

RESULT 2485

AAA70654/c  
 ID AAA70654 standard; DNA; 19 BP.

XX AAA70654;

XX 06-DEC-2000 (first entry)

DE Human G-protein coupled receptor gene primer YS10.

XX Rat; guanosine triphosphate binding protein; brain; histamine binding;  
 KW G-protein coupled receptor protein; signal transduction regulation;  
 KM Alzheimer's disease; memory loss; schizophrenia; insomnia; narcolepsy;  
 KM rheumatoid arthritis; colitis; hypertension; hypotension; anorexia; pain;  
 KM Huntington's disease; obesity; PCR primer; ss.

XX Homo sapiens.

XX WO200039164-A1.

XX 06-JUL-2000.

XX 24-DEC-1999; 99WO-JP007280.

XX 25-DEC-1998; 98WO-JP005967.

XX 25-MAY-1999; 99JP-00145661.

XX (BANY) BANYU PHARM CO LTD.

XX Itadani H, Takimura T, Nakamura T, Kobayashi M, Tanaka K;

XX Hidaka Y, Ohta M;

XX WPI; 2000-452374/39.

PT G protein coupled receptor protein expressed in brain tissue for  
 PT screening signal transduction regulators for use as drugs.

XX Example 2; Page 28; 101bp; Japanese.

CC Primers AAA70649-A70654 are used to PCR amplify cDNA sequence of exons in  
 CC a gene for a human guanosine triphosphate binding protein (G-protein)  
 CC coupled receptor protein (GCRP). The invention relates to the isolation  
 CC of genes for novel GCRP's (AAB15381-B15382) designated BG2 from human and  
 CC rat. The GCRP is expressed in brain tissue and binds to histamine. The  
 CC DNA and protein can be used in the identification of compounds which  
 CC regulate the signal transduction of BG2 and are useful as drugs for the  
 CC treatment and prevention of disorders including Alzheimer's disease,  
 CC memory loss, schizophrenia, insomnia, narcolepsy, rheumatoid arthritis,  
 CC colitis, hypertension, hypotension, Huntington's disease, anorexia,  
 CC obesity and pain

XX Sequence 19 BP; 2 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 588 CTGAACATCAAGAGGGCA 606

Db 19 CTGAACATCAAGAGGGCA 1

RESULT 2486

ABQ94345  
 ID ABQ94345 standard; DNA; 19 BP.

XX ABQ94345;

XX 01-NOV-2002 (first entry)

```

XX DE Human BNO1 gene exon 8a primer 2.
XX
XX KW Human; BNO1; F-box; FBXO; chromosome 16q24.3; SCF ubiquitin-E3 ligase;
XX KW protein ubiquitination; proteasome targeting; breast; prostate; liver;
XX KW ovarian; immune disease; inflammatory disease; AIDS;
XX KW acquired immunodeficiency syndrome; asthma; Crohn's disease;
XX KW multiple sclerosis; neurological disorder; Parkinson's disease;
XX KW Alzheimer's disease; cytostatic; immunomodulator; neuroprotective;
XX KW gene therapy; diagnosis; prognosis; mutation analysis; SSCP;
XX KW single-strand conformation polymorphism; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Labelled with HEX"
XX
XX WO200261081-A1.
XX
XX PD 08-AUG-2002.
XX
XX PF 31-JAN-2002; 2002WO-AU000096.
XX
XX PR 31-JAN-2001; 2001AU-00002783.
XX
XX PA (BION-) BIONOMICS LTD.
XX
XX XX Callen DF, Powell JA, Kremmidiotis G, Gardner AE, Crawford J;
XX PI Bales AJ, Kochetkova M,
XX DR WPI; 2002-619250/66.
XX
XX XX New gene (BNO1) mapping to chromosome 16q24.3, useful in gene therapy,
XX PT e.g. for diagnosing or treating cancers (e.g. lymphoma),
XX PT immune/inflammatory diseases (e.g. AIDS) or neurological disorders (e.g.
XX PT Parkinson's disease).
XX
XX PS Example 8; Page 63; 85pp; English.
XX
XX CC The invention relates to the human and murine BNO1 proteins and nucleic
XX CC acids encoding them. The BNO1 protein is a member of the FBXO class of F-
XX CC box proteins, containing an F-box motif but no other known protein-
XX CC interaction domains. Proteins which contain F-boxes are the substrate
XX CC recognition components of SCF ubiquitin-E3 ligases, which are responsible
XX CC for ubiquitinating proteins, thereby targeting them for degradation in
XX CC the proteasome. In addition, BNO1 is able to interact with Skp1, an
XX CC essential component of SCF ubiquitin-E3 ligases, suggesting that it plays
XX CC a role in the ubiquitin-proteasome degradation system that is involved in
XX CC the regulation of many proteins, particularly those involved in important
XX CC cellular processes such as cell cycle regulation. The human BNO1 gene
XX CC maps to chromosome 16q24.3, and is expressed as two different isoforms.
XX CC Isoform 1 consists of 539 amino acids and is encoded by an open reading
XX CC frame (ORF) of 1617 bp, while the longer isoform 2 consists of 568 amino
XX CC acids encoded by an ORF of 1704 bp. The mRNAs encoding the 2 human BNO1
XX CC isoforms are the product of differential splicing; both comprise exons 1-
XX CC 9, but the isoform 2 mRNA additionally comprises exon 2.5. Loss of
XX CC heterozygosity (LOH) of the long arm of chromosome 16, in which the human
XX CC BNO1 gene is situated, is implicated in breast and prostate cancer, and
XX CC BNO1 expression is also downregulated in these cancers. BNO1 nucleic
XX CC acids, proteins and compounds which modulate BNO1 activity or expression
XX CC may be used for treating disorders associated with altered BNO1 activity
XX CC or expression. Such disorders include cancers (e.g., breast, prostate,
XX CC liver and ovarian cancers), immune/inflammatory diseases (e.g., AIDS
XX CC (acquired immunodeficiency syndrome), asthma, Crohn's disease or multiple
XX CC sclerosis) or neurological disorders (e.g., Parkinson's disease or
XX CC Alzheimer's disease). BNO1 nucleic acids, proteins and antibodies may
XX CC also be used to diagnose or prognose disorders associated with BNO1
XX CC dysfunction, or a predisposition to these disorders. Additionally, BNO1
XX CC nucleic acids and proteins, and transgenic animals comprising human BNO1
XX CC nucleic acid sequences or in which BNO1 gene function has been knocked

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CC CC out are useful in screening potential drugs for treating BNO1-associated
CC CC disorders, and the human BNO1 protein isoforms are particularly useful
CC CC for identifying BNO1-specific protein substrates that are targeted for
CC CC degradation by ubiquitination. Sequences AB094326-AB094349 represent
CC CC human BNO1 gene-specific PCR primers used in SSCP (single-strand
CC CC conformation polymorphism) analysis of tumours and cell lines for BNO1
CC CC mutations in an exemplification of the invention
XX
XX SQ Sequence 19 BP; 3 A; 11 C; 2 G; 3 T; 0 U; 0 Other:
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.se+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Oy 4749 ACCCTTCGCGCACCTCCA 4767
XX Db 1 ACCCTTCGCGCACCTCCA 19
XX
XX RESULT 2487
XX ADL79781/c
XX ID ADL79781 standard; RNA; 19 BP.
XX
XX AC ADL79781;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human HER1 (EGFR) siNA lower strand, SEQ ID NO:946.
XX
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX KW short hairpin RNA; shRNA; expression modulation; gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping; cancer;
XX KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
XX KW HER1; C-erb-B-1; ss.
XX
XX OS Homo sapiens.
XX
XX WO2003070912-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 20-FEB-2003; 2003WO-US005045.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0361124P.
XX PR 29-MAY-2002; 2002WO-US016840.
XX PR 06-JUN-2002; 2002US-00163552.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 23-JUL-2002; 2002US-0393924P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 19-SEP-2002; 2002US-00251117.
XX PR 21-OCT-2002; 2002US-00277494.
XX PR 15-JAN-2003; 2003US-0440129P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Meswiygen J, Pavco P, Beigelman L, Fossnaugh K, Jamison S;
XX DR WPI; 2003-697612/66.
XX
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of cancer, downregulates expression of the epidermal growth
XX PT factor receptor gene.
XX
XX XX Example 3; SEQ ID NO 946; 171bp; English.
XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of one or more human epidermal growth factor
XX CC receptor (EGFR) genes (including HER1, HER2 HER3 and HER4) by RNA

```

CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA, conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of EGFR genes in cells, tissue explants or  
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
 CC for the treatment of a variety of conditions. They may be used for  
 CC treating a wide range of cancers such as breast and ovarian cancer. The  
 CC siRNAs are also useful for drug screening, diagnosis, therapeutic target  
 CC identification and validation, genetic engineering, pharmacogenomics,  
 CC studying gene function, and gene mapping (e.g., of single nucleotide  
 CC polymorphisms). The present sequence represents the lower strand of a  
 CC human HER1 (EGFR)-targeted double-stranded siRNA.

XX  
 SQ Sequence 19 BP; 4 A; 1 C; 11 G; 0 T; 3 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 4751 CCTCTCCCTCACCCTCCACC 4769  
 Db 19 CATCTGCTCACCCTCCACC 1

RESULT 2488  
 ADL79474  
 ID ADL79474 standard; RNA; 19 BP.

XX  
 AC ADL79474;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX

DE Human HER1 (EGFR) transcript target sequence/siRNA upper strand, SEQ:639.

XX  
 KM RNA interference; short interfering nucleic acid; siNA;  
 KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KM short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KM drug screening; diagnosis; therapeutic target identification;  
 KM pharmacogenomics; gene function analysis; gene mapping; cancer;  
 KM cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;  
 KM HER1; c-erb-B-1; target sequence; ss.

XX  
 OS Homo sapiens.  
 PN WO2003070912-A2.  
 PD 28-AUG-2003.  
 XX

PF 20-FEB-2003; 2003WO-US005045.

XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 29-MAY-2002; 2002WO-US016840.  
 PR 06-JUN-2002; 2002US-00163552.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 03-JUL-2002; 2002US-0393924P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 19-SEP-2002; 2002US-00251117.  
 PR 21-OCT-2002; 2002US-00377494.  
 PR 15-JAN-2003; 2003US-0440129P.

XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcawiggen J, Pavco P, Beigelman L, Fossnaugh K, Jamison S;

XX  
 DR WPI; 2003-697612/66.  
 XX  
 PT New short interfering nucleic acid, useful e.g. for treatment and  
 PT diagnosis of cancer, downregulates expression of the epidermal growth  
 PT factor receptor gene.

XX  
 PS Example 3; SEQ ID NO 639; 17bp; English.

XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of one or more human epidermal growth factor  
 CC receptor (EGFR) genes (including HER1, HER2, HER3 and HER4) by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siRNAs are  
 CC used to modulate expression of EGFR genes in cells, tissue explants or  
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants  
 CC for the treatment of a variety of conditions. They may be used for  
 CC treating a wide range of cancers such as breast and ovarian cancer. The  
 CC siRNAs are also useful for drug screening, diagnosis, therapeutic target  
 CC identification and validation, genetic engineering, pharmacogenomics,  
 CC studying gene function, and gene mapping (e.g., of single nucleotide  
 CC polymorphisms). The present sequence represents the upper strand of a  
 CC human HER1 (EGFR)-targeted double-stranded siNA, which is identical to  
 CC the HER1 transcript target sequence.

XX  
 SQ Sequence 19 BP; 3 A; 11 C; 1 G; 0 T; 4 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 68.4%; Pred. No. 1.5e+03;  
 Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

OY 4751 CCTCTCCCTCACCCTCCACC 4769  
 Db 1 CAUCUGCUCACCCUCCACC 19

RESULT 2489  
 ADN34406  
 ID ADN34406 standard; RNA; 19 BP.

XX  
 AC ADN34406;  
 XX  
 DT 01-JUL-2004 (first entry)  
 XX

DE Lower strand of cyclin D1 targeted double stranded siNA #187.

XX  
 KM short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;  
 KM cancer; cell-proliferation disorder; restenosis; drug screening;  
 KM genetic engineering; pharmacogenomics; gene mapping;  
 KM single nucleotide polymorphisms; ss.

XX  
 OS Homo sapiens.  
 PN WO2003072705-A2.  
 PD 04-SEP-2003.  
 XX

PF 06-FEB-2003; 2003WO-US003662.

XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.

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PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
PA (RIBO-) RIBOZYME PHARM INC.
PI Thompson J, Mcswiggen J, Beigelman L;
XX WPI; 2003-689983/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer and restenosis, down regulates expression of at least
XX one cyclin gene.
XX
XX Example 3; SEQ ID NO 426; 144bp; English.
XX
XX The present invention relates to a short interfering nucleic acid (siNA)
XX that down regulates expression of at least one cyclin gene by RNA
XX interference. siNA are used to modulate expression of cyclin genes, in
XX cells, tissue explants or organisms, e.g. for treating a wide range of
XX cancers and other cell-proliferation disorders such as restenosis, but
XX also for drug screening, diagnosis, target identification and validation;
XX genetic engineering, pharmacogenomics, studying gene function and gene
XX mapping (e.g. of single-nucleotide polymorphisms). The present sequence
XX represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
XX Sequence 19 BP; 7 A; 6 C; 5 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 1.5e+03;
XX Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1083 CCAAGCAGCGCCGAGACTG 1101
DB 1 CCAAGCAGCGCAGACCTG 19
XX
RESULT 2490
ADN34167/c
XX ADN34167 standard; RNA; 19 BP.
XX
AC ADN34167;
XX
DT 01-JUL-2004 (first entry)
XX
DE Upper strand of cyclin D1 targeted double stranded siNA #187.
XX
XX short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
XX cancer; cell-proliferation disorder; restenosis; drug screening;
XX genetic engineering; pharmacogenomics; gene mapping;
XX single nucleotide polymorphisms; ss.
XX
XX Homo sapiens.
XX
XX WO2003072705-A2.
XX
XX 04-SEP-2003.
XX
XX 06-FEB-2003; 2003MO-US003662.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-036782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 17-SEP-2002; 2002US-0411275P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Thompson J, Mcswiggen J, Beigelman L;
XX WPI; 2003-689983/65.
XX

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XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer and restenosis, down regulates expression of at least
XX one cyclin gene.
XX
XX Example 3; SEQ ID NO 187; 144bp; English.
XX
XX The present invention relates to a short interfering nucleic acid (siNA)
XX that down regulates expression of at least one cyclin gene by RNA
XX interference. siNA are used to modulate expression of cyclin genes, in
XX cells, tissue explants or organisms, e.g. for treating a wide range of
XX cancers and other cell-proliferation disorders such as restenosis, but
XX also for drug screening, diagnosis, target identification and validation;
XX genetic engineering, pharmacogenomics, studying gene function and gene
XX mapping (e.g. of single-nucleotide polymorphisms). The present sequence
XX represents the upper strand of cyclin D1 targeted double stranded siNA
XX which is identical to the cyclin D1 transcript target sequence.
XX
XX Sequence 19 BP; 1 A; 5 C; 6 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1083 CCAAGCAGCGCCGAGACTG 1101
DB 19 CCAAGCAGCGCAGACCTG 1
XX
RESULT 2491
ADP11749/c
XX ADP11749 standard; DNA; 19 BP.
XX
AC ADP11749;
XX
DT 12-AUG-2004 (first entry)
XX
DE Set 2 left PCR primer for marker probe #101.
XX
XX transplant rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
XX Homo sapiens.
XX
XX WO2004042346-A2.
XX
XX 21-MAY-2004.
XX
XX 24-APR-2003; 2003MO-US012946.
XX
XX 24-APR-2002; 2002US-00131831.
XX 20-DEC-2002; 2002US-00325899.
XX
XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
XX Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;
XX WPI; 2004-400724/37.
XX
XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of
XX the genes.
XX
XX Claim 58; SEQ ID NO 1758; 1762bp; English.
XX
XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprising detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
XX

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CC xenotransplant rejection or mechanical organ replacement rejection, in an  
CC individual. The method is also useful in assessing the immune status of  
CC an individual. The methods are also useful in diagnosing and monitoring  
CC diseases that involve the immune system, e.g. rheumatoid arthritis,  
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or  
CC viral, bacterial or fungal infection. The present sequence represents a  
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring  
CC of allograft rejection and other disorders.  
XX  
SQ Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
DY 2489 CAGTCTCAGTACGCTCCAG 2507  
DB 19 CAGTCTCAGTACGCTCCAG 1  
RESULT 2492  
ADR76661  
ID ADR76661 standard; DNA; 19 BP.  
XX  
AC ADR76661;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1146.  
XX  
KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KM RNA interference; iRNA; antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465655P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0465612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
PA (ALNY -) ALNYLAM PHARM.  
XX  
PI Manoharan M, Bumcrot D;  
XX  
XX  
DR WPI; 2004-677362/66.  
PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

XX  
PS Example 5; SEQ ID NO 1146; 378bp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
SQ Sequence 19 BP; 5 A; 5 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
DY 4378 CGTTCACATCATCATGTGA 4396  
DB 1 CGTTCACATCATCATGTGA 19  
RESULT 2493  
ADR79925  
ID ADR79925 standard; DNA; 19 BP.  
XX  
AC ADR79925;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4421.  
XX  
XX  
KM antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KM RNA interference; iRNA; antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2004080406-A2.  
XX  
PD 23-SEP-2004.  
XX  
PF 08-MAR-2004; 2004WO-US007070.  
XX  
XX  
PR 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.

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PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0465612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4421; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are pharmaceutical preparations comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 8 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred.No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 4369 ACAGAAACGCTCACT 4387
XX | | | | | | | | | |
XX 1 ACAGAAACGCTCACT 19
XX
XX
XX RESULT 2494
XX ADR79183
XX ADR79183 standard; DNA; 19 BP.
XX
XX ADR79183;
XX
XX 16-DEC-2004 (first entry)

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XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3668.
XX
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytosolic; anticonvulsant; nootropic; muscular; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX MO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3668; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are pharmaceutical preparations comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or

```

CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4373 GAATACGTTCACTATCA 4391  
Db 1 GAATACGTTCACTATCA 19

RESULT 2495

ADR76519/c

ADR76519 standard; DNA; 19 BP.

ADR76519;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 1004.  
antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; tRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004MO-US007070.

07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454285P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.  
25-APR-2003; 2003US-0465665P.  
25-APR-2003; 2003US-0465802P.  
09-MAY-2003; 2003US-0469612P.  
08-AUG-2003; 2003US-0493986P.  
11-AUG-2003; 2003US-0506341P.  
26-SEP-2003; 2003US-0506341P.  
09-OCT-2003; 2003US-0510246P.  
10-OCT-2003; 2003US-0510318P.  
07-NOV-2003; 2003US-0518453P.

(ALANY-) ALANYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemia, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 1004; 378bp; English.

The invention describes a RNA interference (iRNA) agent (I) comprising a

CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

SQ Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 527 GGCATTCCAGAGCGAG 545

Db 19 GGCATTCCAGAGCGAG 1

RESULT 2496

ADR77548

ADR77548 standard; DNA; 19 BP.

ADR77548;

16-DEC-2004 (first entry)

Human apolipoprotein B (ApoB) oligonucleotide seqid 2033.

antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; tRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.

Homo sapiens.

WO2004080406-A2.

23-SEP-2004.

08-MAR-2004; 2004MO-US007070.

07-MAR-2003; 2003US-0452682P.  
12-MAR-2003; 2003US-0454285P.  
13-MAR-2003; 2003US-0454962P.  
13-MAR-2003; 2003US-0455050P.  
14-APR-2003; 2003US-0462894P.  
17-APR-2003; 2003US-0463772P.



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PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Inference RNA agent useful for treating dyslipidemia, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 2033; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, hypertriglyceridaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX
XX Sequence 19 BP; 7 A; 5 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 4373 GAATACGCTCAGCTATCA 4391
XX 1 GAATACGCTCAGCTATCA 19
XX
XX RESULT 2497
XX ADDR79605 standard; DNA; 19 BP.
XX
XX ADDR79605;
XX
XX 16-DEC-2004 (first entry)
XX
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 4099.
XX
XX antilipemic; cardiact; vasotrophic; antiarteriosclerotic; antidiabetic;
XX

```

```

XX cytosol; anticonvulsant; nootropic; macula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.
XX
XX Homo sapiens.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 14-MAR-2003; 2003US-0455050P.
XX 17-APR-2003; 2003US-0462894P.
XX 25-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465655P.
XX 09-MAY-2003; 2003US-0465802P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Inference RNA agent useful for treating dyslipidemia, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 4099; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX hypercholesterolaemia, hypertriglyceridaemia, statin-resistant
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control Apob gene expression.
XX

```

XX SQ Sequence 19 BP; 5 A; 5 C; 3 G; 6 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 4378 CGTTCACACTATCATGTGA 4396  
Db 1 CGTTCACACTATCATGTGA 19  
RESULT 2498  
AD76981  
ID ADR76981 standard; DNA: 19 BP.  
XX ADR76981;  
XX 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1466.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
XX RNA interference; RNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX Homo sapiens.  
XX WO2004080406-A2.  
XX PN 23-SEP-2004.  
XX PD 08-MAR-2004; 2004MO-US007070.  
XX PF 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462884P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 09-MAY-2003; 2003US-0465802P.  
XX PR 08-AUG-2003; 2003US-0493986P.  
XX PR 11-AUG-2003; 2003US-0494587P.  
XX PR 26-SEP-2003; 2003US-0506341P.  
XX PR 09-OCT-2003; 2003US-0510246P.  
XX PR 10-OCT-2003; 2003US-0510318P.  
XX PR 07-NOV-2003; 2003US-0518453P.  
XX (ALANY-) ALNTLAM PHARM.  
XX PA Manoharan M, Bumcrot D;  
XX PI WPI; 2004-677362/66.  
XX DR  
XX Interference RNA agent useful for treating dyslipidaemia, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX PT sequence and antisense sequence which has specific modifications.  
XX PS Example 5; SEQ ID NO 1466; 378bp; English.  
XX CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described

CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemia, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control Apob gene expression.  
XX SQ Sequence 19 BP; 8 A; 5 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 4369 ACAAGATACGTCACACT 4387  
Db 1 ACAAGATACGTCACACT 19  
RESULT 2499  
AD79463/c  
ID ADR79463 standard; DNA: 19 BP.  
XX ADR79463;  
XX 16-DEC-2004 (first entry)  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3948.  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
XX cytostatic; anticoagulant; nootropic; muscular; anti-HIV;  
XX RNA interference; RNA; antisense technology; lipid metabolism;  
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
XX coronary artery disease; CAD; coronary heart disease; CHD;  
XX atherosclerosis; hepatic glucose production;  
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
XX colon cancer; lung cancer; neurological disease; Huntington disease;  
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX Homo sapiens.  
XX WO2004080406-A2.  
XX PN 23-SEP-2004.  
XX PD 08-MAR-2004; 2004MO-US007070.  
XX PF 07-MAR-2003; 2003US-0452682P.  
XX PR 12-MAR-2003; 2003US-0454265P.  
XX PR 13-MAR-2003; 2003US-0454962P.  
XX PR 13-MAR-2003; 2003US-0455050P.  
XX PR 14-APR-2003; 2003US-0462884P.  
XX PR 17-APR-2003; 2003US-0463772P.  
XX PR 25-APR-2003; 2003US-0465665P.  
XX PR 09-MAY-2003; 2003US-0465802P.  
XX PR 08-AUG-2003; 2003US-0493986P.

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PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Buncroft D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 3948; 378bp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (M1)
XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.5e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 527 GGCATTTCGAGAGGAG 545
XX |||||
XX 19 GGCATTACAGACGAG 1
XX
XX RESULT 2500
XX AAQ65887
XX ID AAQ65887 standard; DNA; 20 BP.
XX
XX AAQ65887;
XX
XX 25-MAR-2003 (revised)
XX 22-DEC-1994 (first entry)
XX
XX Type II procollagen PCR primer IH-40.
XX
XX Type II procollagen: COL2A1; amplification; primer;
XX polymerase chain reaction; PCR; osteoarthritis; cartilage; ss.
XX
XX Synthetic.
XX

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XX
XX MO9411532-A1.
XX
XX 26-MAY-1994.
XX
XX 12-NOV-1993; 93WO-US010964.
XX
XX 13-NOV-1992; 92US-00977284.
XX
XX (UYJE-) UNIV JEFFERSON THOMAS.
XX
XX Prockop DJ, Ala-Kokko L, Williams CJ, Ritvanemi P, Baldwin C;
XX Hopkinson I, Ahmad NN;
XX
XX WPI; 1994-183530/22.
XX
XX Detecting genetic pre-disposition to osteoarthritis - and other diseases
XX involving mutation in cartilage protein genes, by amplification and
XX analysis of DNA and comparison with standards.
XX
XX Claim 18; Page 29; 112pp; English.
XX
XX Claim 18 claims primers for use in detecting mutations in a mammalian
XX gene for a structural protein of cartilage comprising a sequence
XX identified in Table I (Page 18-31). Table I includes 179 primer sequences
XX (see AAQ65728-065906). The following details are given for primer IH-40:
XX Region/exon: 48/49 Direction: sense Primer position: 19622 (Updated on 25
XX -MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1884 AATGACCAATGTGAAGAACT 1902
XX |||||
XX 1 ACTGAGCATGTGAAGAACT 19
XX
XX RESULT 2501
XX AA52748
XX ID AA52748 standard; DNA; 20 BP.
XX
XX AA52748;
XX
XX 02-NOV-1998 (first entry)
XX
XX Angiotensin-converting enzyme PCR 5'-primer SEQ ID NO:1.
XX
XX Angiotensin-converting enzyme; ACE; human; heart; PCR primer; detection;
XX screening; cardiovascular disease; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX US5800990-A.
XX
XX 01-SEP-1998.
XX
XX 06-DEC-1995; 95US-00568271.
XX
XX 06-DEC-1995; 95US-00568271.
XX
XX (COLS ) UNIV COLORADO.
XX
XX Perryman MB, Reynolds MV;
XX
XX WPI; 1998-494763/42.
XX
XX Detecting mutation(s) in angiotensin-converting enzyme gene - to assess
XX cardiovascular disease risk.
XX

```

PS Example 1; Col 9; 12pp; English.

CC The following methods have been developed for detecting small deletions,  
 CC insertions or point mutations in an angiotensin-converting enzyme (ACE)  
 CC gene of a human patient: (1) a method comprising: (a) isolating an ACE  
 CC genomic DNA sequence from the patient, where the sequence spans intron  
 CC 25, using oligonucleotide primers in the 3' region of exon 25 and the 5'  
 CC region of exon 26; (b) hybridizing the genomic sequence with a detectable  
 CC probe specific for the corresponding sequence with no mutations; and (c)  
 CC detecting mismatches between the genomic sequence and the probe; (2) a  
 CC method comprising: (a) isolating an ACE genomic DNA sequence as in (1);  
 CC (b) amplifying the sequence; (c) hybridizing the amplification products  
 CC with a probe as in (1); and (d) detecting mismatches between the  
 CC amplification products and the probe; (3) a method comprising: (a)  
 CC isolating an ACE genomic DNA sequence as in (1); (b) denaturing the  
 CC genomic sequence to obtain single-stranded DNA; (c) hybridizing the  
 CC single-stranded DNA with a probe as in (1); and (d) detecting mismatches  
 CC between the single-stranded DNA and the probe; (4) a method comprising:  
 CC (a) isolating an ACE genomic DNA sequence as in (1); (b) amplifying the  
 CC sequence; (c) denaturing the amplification products to obtain single-  
 CC stranded DNA; (d) hybridizing the single-stranded DNA with a probe as in  
 CC (1); and (e) detecting mismatches between the single-stranded DNA and the  
 CC probe. The methods are used for assessing the patient's risk of  
 CC developing cardiovascular disease. The present sequence represents a PCR  
 CC primer for ACE

XX Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.6e+03; Mismatches 17; Conservative 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194  
 Db 1 GCTGCCGCTGCTGCTGCTG 19

RESULT 2502

AAZ08437/c

ID AAZ08437 standard; DNA; 20 BP.

XX AAZ08437;

DT 28-JUN-1999 (first entry)

DE Primer for amplifying interferon gamma receptor gene sequence.

XX Manganese containing superoxide dismutase; MnSOD; IDDM;

KW diabetes mellitus; treatment; therapy; nitric oxide; NO; beta cell;

KW fatty acid; lipotoxic; cytotoxic; cytokine; osteoporosis; PCR primer;

KW inflammatory disease; autoimmune disease; neurodegenerative disease; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9906053-A2.

XX 30-JUL-1998; 98WO-US015781.

XX 30-JUL-1997; 97US-0055092P.

XX 03-MAR-1998; 98US-0076676P.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX (BETA-) BETAGENE INC.

PI Hohmeyer H, Thigpen A, Clark SA, Newgard CB, Unger RH;

XX Shimabukuro M, Koyama K, Ohneda M, Lee Y;

XX WPI; 1999-153448/13.

XX Protection of mammalian cells against immunotoxicity or lipotoxicity -

PT used for treating, e.g. diabetes, obesity, wasting syndromes,  
 PT osteoporosis, inflammatory diseases, autoimmune diseases or  
 PT neurodegenerative diseases.

XX Example 1; Page 155; 253pp; English.

XX Inhibition of cytokine mediated immunotoxicity of cells can be achieved  
 CC by blocking free radical production or the accumulation of free radicals  
 CC in that cell. Treatment of insulin dependent diabetes mellitus (IDDM) can  
 CC be achieved by by blocking nitric oxide (NO) production in a pancreatic  
 CC beta cell and by providing a composition comprising an agent that reduces  
 CC levels of fatty acids in the cells and protects beta-cells of the subject  
 CC against lipid-mediated cell death. Cells can also be protected against  
 CC nitric oxide mediated cytotoxicity by introducing into the cell an  
 CC antioxidant agent. The methods can be used for protecting cells against  
 CC immunotoxicity mediated by, e.g. IL-1 beta, IL-1 alpha, gamma IFN, TNF  
 CC alpha, TNF beta, IL-8, IL-2, IL-3, IL-5, IL-7, IL-9, IL-14,  
 CC IL-17, granulocyte-macrophage colony stimulating factor or monocyte  
 CC chemoattractant protein-1. The methods can be used for the treatment of  
 CC e.g. insulin-dependent diabetes mellitus (IDDM), NIDDM, obesity, wasting  
 CC syndromes, short stature, osteoporosis, inflammatory diseases, autoimmune  
 CC diseases, or neurodegenerative diseases. Two primers (AAZ08437, AAZ08438)  
 CC were used to amplify the interferon gamma receptor gene sequence

XX Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.6e+03; Mismatches 17; Conservative 0; Indels 0; Gaps 0;

QY 4681 CCAACCTGAGTTTAATC 4699  
 Db 20 CCAACCTGAGTTTAATC 2

RESULT 2503

AAZ28916/c

ID AAZ28916 standard; DNA; 20 BP.

XX AAZ28916;

DT 07-FEB-2000 (first entry)

DE Forward primer aal8 for amplification of paraplegin gene exon.

XX Forward primer aal8; paraplegin; human; hereditary spastic paraplegia;

KW HSP; mutation; diagnosis; treatment; neurodegenerative condition;

KW Amyotrophic lateral Sclerosis; ALS; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9958556-A2.

XX 18-NOV-1999.

XX 06-MAY-1999; 99WO-EP003112.

XX 08-MAY-1998; 98IT-MI001003.

XX (TELE-) FOND TELETHON.

XX Ballabio A, Casari G;

XX WPI; 2000-039065/03.

XX A novel protein associated to hereditary spastic paraplegia used for the

XX PT diagnosis of neurodegenerative conditions.

XX Claim 4, Fig 3; 53pp; English.

XX The present sequence is a forward primer aal8 used for amplification and

XX detection of mutations in paraplegin gene exon from hereditary spastic

CC paraplegia (HSP) patients. Detection of mutations in paraplegin gene  
 CC helps in the diagnosis and treatment of various forms of HSP or other  
 CC neurodegenerative conditions, such as Amyotrophic Lateral Sclerosis  
 XX  
 SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4333 ACAATGTCGAAGATCTGG 4351  
 |||||  
 DB 19 ACAATGTCGAAGACTGG 1

## RESULT 2504

AAC73728  
 ID AAC73728 standard; DNA; 20 BP.

XX AAC73728;

DT 02-FEB-2001 (first entry)

XX Mouse IL-5 receptor-alpha antisense oligonucleotide ISIS #16926.

XX Mouse; interleukin-5; IL-5; signal transduction;  
 KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;  
 KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;  
 KW inflammation; cancer; ss.

XX Mus musculus.

OS Synthetic.

XX WO200058512-A1.

XX 05-OCT-2000.

XX 17-MAR-2000; 2000WO-US007318.

XX 26-MAR-1999; 99US-00280799.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Karras JG, McKay R;

XX WPI; 2000-594648/56.

DR Antisense oligonucleotide compound used to treat asthma and eosinophilic  
 PT syndrome in humans modulates interleukin-5 signal transduction.  
 XX

PS Example 23; Page 70; 156bp; English.

XX The present sequence is an oligonucleotide used for antisense modulation  
 CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were  
 CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.  
 CC The antisense oligonucleotides may be used for the treatment of diseases  
 CC associated with IL-5 signal transduction, IL-5 expression or IL-5  
 CC receptor-alpha expression. Such diseases include asthma and eosinophilic  
 CC syndrome. The oligonucleotides are also useful for research uses and to  
 CC prevent or delay infection, inflammation or tumour formation

SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3663 AACACAGCACCATGTAG 3681  
 |||||  
 DB 1 AACACAGCACCATGTAG 19

## RESULT 2505

AAC60516  
 ID AAC60516 standard; DNA; 20 BP.

XX AAC60516;

DT 31-JAN-2001 (first entry)

XX Human fra-1 mRNA antisense oligonucleotide ISIS 109007.

XX Human; fra-1; antisense oligonucleotide; phosphorothioate; cytostatic;  
 KW antineoplastic; 2'-methoxyethyl wing; 2'-MOE wing; infection; cancer;  
 KW ss.

XX Homo sapiens.

OS Synthetic.

XX US6124133-A.

XX 26-SEP-2000.

XX 15-OCT-1999; 99US-00418641.

XX 15-OCT-1999; 99US-00418641.

XX (ISIS-) ISIS PHARM INC.

XX Taylor JK, Cowser LM;

XX WPI; 2000-601552/57.

XX Novel antisense compound 8-30 nucleobases in length targeted to human fra-  
 PT -1 and which specifically hybridizes with and inhibits the expression of  
 PT human fra-1, useful for modulating the expression of fra-1 in cells.  
 XX

PS Claim 3; Col 40; 38bp; English.

XX The present sequence is one of a large number of antisense  
 CC oligonucleotides which are targeted to nucleic acids encoding fra-1. The  
 CC sequences may be oligodeoxyribonucleotides or chimeric oligonucleotides  
 CC containing a central gap region consisting of ten 2'-deoxynucleotides,  
 CC which is flanked on both sides by 2'-methoxyethyl (2'-MOE) wings. The  
 CC oligonucleotides have a phosphorothioate backbone and the cytidine  
 CC residues in the 2'-MOE wings are 5-methylcytidines. The fra-1 antisense  
 CC oligonucleotides are useful for inhibiting the expression of fra-1 in  
 CC human cells or tissues. They can be used for diagnostics, therapeutics,  
 CC prophylaxis and as research reagents and in kits. Use of the antisense  
 CC compounds may also be useful prophylactically, e.g. to prevent or delay  
 CC infection, inflammation or tumour formation

SQ Sequence 20 BP; 0 A; 8 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 167 GCTGCTGCGCTGCTGCTG 165  
 |||||  
 DB 1 GCTGCTGCGCTGCGCGCG 19

RESULT 2506  
 AAD11506/c  
 ID AAD11506 standard; DNA; 20 BP.

XX AAD11506;

DT 24-SEP-2001 (first entry)

XX Human glycogen synthase kinase 3-beta antisense oligo ISIS 117435.  
 DE Antisense; glycogen synthase kinase 3-beta; GSK3B; diabetes; infection;  
 KW insulin regulation disorder; neurological disorder; Alzheimer's disease;  
 KW bipolar illness; inflammation; tumour; phosphorothioate; TPK-I;

KW tau protein kinase I; human; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT 1..20 /tag= a  
FT modified\_base /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT 1..5  
FT modified\_base /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT 1 /tag= d  
FT modified\_base /mod\_base= m5c  
FT 2 /tag= e  
FT modified\_base /mod\_base= m5c  
FT 11 /tag= f  
FT modified\_base /mod\_base= m5c  
FT 12 /tag= g  
FT modified\_base /mod\_base= m5c  
FT 14 /tag= h  
FT modified\_base /mod\_base= m5c  
FT 15 /tag= i  
FT modified\_base /mod\_base= m5c  
FT 16..20  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
FT 17 /tag= j  
FT /mod\_base= m5c  
FT  
FT  
FT  
PN WO200152862-A1.  
XX  
XX 26-JUL-2001.  
PD  
XX  
XX 12-JAN-2001; 2001MO-US001085.  
PR 19-JAN-2000; 2000US-00489765.  
XX  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Butler MM, McKay R, Monia BP, Wyatt JR;  
PI  
XX  
XX WPI; 2001-457510/49.  
DR  
XX  
XX Novel antisense compounds, particularly antisense oligonucleotides for  
PT inhibiting expression of glycogen synthase kinase 3 beta in cells and for  
PT diagnosing, treating neurological and insulin regulation disorders.  
XX  
XX  
PS Claim 3; Page 82; 106pp; English.  
XX  
XX The invention relates to antisense compounds targeted to nucleic acid  
CC encoding glycogen synthase kinase 3-beta (GSK3B) (also known as tau  
CC protein kinase I (TPK-I)). The antisense compound is useful for  
CC inhibiting the expression of glycogen synthase kinase 3-beta enzyme in  
CC cells or tissues and for treating diseases or conditions associated with  
CC the enzyme such as insulin regulation disorder, in particular diabetes  
CC and neurological disorder, e.g. Alzheimer's disease and bipolar illness.  
CC The antisense compound is also useful for diagnosing diseases associated  
CC with the expression of glycogen synthase kinase 3-beta and for  
CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour  
CC formation and as a research reagent. The present sequence is an antisense  
CC compound targeted to human glycogen synthase kinase 3-beta mRNA  
XX

SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;  
-Query Match. 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 4246 ACAGTGTGTGCAACACCG 4264  
DB 20 ACAGTGTGTGCAACTCTG 2  
RESULT 2507  
AAF90493/c  
ID AAF90493 standard; DNA; 20 BP.  
XX  
XX AAF90493;  
AC  
XX  
XX 22-AUG-2001 (first entry)  
DT  
XX  
XX COL1A1 gene antisense oligonucleotide 2.  
DE  
XX  
XX COL1A1 gene; collagen; procollagen; human; antisense; vulnereary;  
KW dermatological; scar; keloid; scleroderma; cirrhosis; fibrosis; therapy;  
KW ss.  
XX  
XX Synthetic.  
OS  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20 /tag= a  
FT /note= "phosphorothioate linkage"  
FT  
FT  
PN WO200144455-A2.  
XX  
XX 21-JUN-2001.  
PD  
XX  
XX 12-DEC-2000; 2000MO-GB004741.  
PR 15-DEC-1999; 99GB-00029487.  
XX  
XX (ASTR ) ASTRAZENECA AB.  
PA (ASTR ) ASTRAZENECA UK LTD.  
XX  
PI Bert R;  
XX  
XX WPI; 2001-398145/42.  
DR  
XX  
XX Novel antisense DNA oligonucleotide useful for inhibiting the expression  
PT of wild type COL1A1 gene, for treating, reducing the risk of, and  
PT preventing collagen disorders.  
XX  
XX  
PS Claim 10; Page 8; 30pp; English.  
XX  
XX The present sequence is that of 1 of 12 claimed antisense  
CC oligonucleotides (ASOs, see AAF90492-503) of the invention. These ASOs  
CC are complementary to regions of the human gene (see AAF90491) for the pro  
CC -alpha-1 chain of type I procollagen. They are capable of inhibiting the  
CC expression of type I procollagen pro-alpha-1 chain in a cell that  
CC expresses it. The ASO, or a pharmaceutical composition including it, is  
CC used in a claimed method of treating, or reducing a risk of, a collagen  
CC disorder. Such disorders may include those caused by overproduction of  
CC collagen fibres, such as liver cirrhosis, kidney, liver and heart  
CC fibrosis, scleroderma, hypertrophic scars and keloids. The present ASO,  
CC when administered to human WI-26 cells, inhibited type I collagen  
CC production by 50-80%  
XX  
SQ Sequence 20 BP; 5 A; 7 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 153 CTGGCGCTGCTGGCGCTGC 171

```

Db      19  ||||| ||||| |||||
          CTGGCCCTGCTGCTGCTG 1

RESULT 2508
AAF54559
ID      AAF54559 standard; DNA; 20 BP.
XX
XX
AC      AAF54559;
XX
XX      03-APR-2001 (first entry)
XX
XX      Human HLA Class I oligonucleotide probe SEQ ID NO: 4.
DE
XX
XX      Human; HLA typing; oligonucleotide array; Class I; gene discovery;
KM      expression; polymorphism detection; mapping; probe; PCR primer; ss.
XX
XX      Homo sapiens.
OS
XX      WO200079006-A1.
XX
XX      28-DEC-2000.
XX
XX      16-JUN-2000; 2000WO-US016722.
XX
XX      17-JUN-1999; 99US-0139843P.
XX
XX      (HUTC-) HUTCHINSON CANCER RES CENT FRED.
PA      (UNIW) UNIV WASHINGTON.
PI      Peterdorf EW, Guo Z, Hansen JA, Hood L;
XX
XX      WPI; 2001-102734/11.
XX
XX      Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue
PT      typing, comprises HLA class I oligonucleotide probes representing all
PT      known polymorphisms in HLA class I locus, on a solid support.
XX
XX      Disclosure; Page 45; 83pp; English.
XX
XX      The present invention provides a microarray of oligonucleotides
CC      comprising probes for the human HLA Class I genes attached to a solid
CC      support. These can be used in HLA typing. Oligonucleotide arrays are also
CC      useful in large scale gene discovery, monitoring gene expression,
CC      polymorphism detection and gene mapping
XX
XX      Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1304 TCACATCTCTCCAGTGGCTG 1322
      ||||| ||||| |||||
      1 TCACACCTCTCCAGTGATG 19

RESULT 2509
AAS20967
ID      AAS20967 standard; DNA; 20 BP.
XX
XX
AC      AAS20967;
XX
XX      09-APR-2002 (first entry)
XX
XX      PCR primer Shnpn-U relating to gene imprinting invention.
DE
XX
XX      Human; genomic imprinting; pluripotent mouse embryonic germ cell line;
KM      EG; methylated CpG island; DNA methylation; gene imprinting;
KM      post-translational modification of histone; cancer; birth defect;
KM      diabetes; aberrant imprinting; PCR; primer; ss.
XX
XX      Homo sapiens.
OS

```

```

XX
XX      WO200190313-A2.
XX
XX      29-NOV-2001.
XX
XX      22-MAY-2001; 2001WO-US016253.
XX
XX      22-MAY-2000; 2000US-0206158P.
XX
XX      22-MAY-2000; 2000US-0206161P.
XX
XX      (UYJO) UNIV JOHNS HOPKINS.
XX
XX      Feinberg A, Strichman-Almashanu L, Jiang S;
XX
XX      WPI; 2002-083100/11.
XX
XX      Forming embryonic germ cells useful as model system to study imprinting
PT      involves mating genetically divergent male and female mammal of same
PT      species, dissecting and dissociating embryo obtained from pregnant
PT      mammal.
XX
XX      Disclosure; Page 54; 125pp; English.
XX
XX      The present invention relates to a model system for genomic imprinting
CC      using pluripotent mouse embryonic germ (EG) cell lines derived from an
CC      interspecific cross. Also disclosed is a library containing methylated
CC      CpG islands and a method for assaying methylation in one or more
CC      imprintable genes. The gene imprinting assay is carried out by single-
CC      strand conformation polymorphism (SSCP), quantitative sequencing, single-
CC      nucleotide primer extension or hot stop PCR. The assays are carried out
CC      to determine the post-translational modification of histones. The method
CC      further involves identifying a test substance as a candidate drug for
CC      treating cancer if the test substance enhances as a candidate drug for
CC      imprinting is lost in cancer, or if the test substance inhibits
CC      imprinting of a gene whose imprinting is gained in cancer. The methylated
CC      CpG islands are useful for providing an assessment of the risk of
CC      developing cancer, or for providing diagnostic information relative to
CC      cancer which involves determining the methylation status of the CpG
CC      island in a patient's DNA. The EG cells allow the accession of imprinted
CC      genes which are useful for detecting birth defects, diabetes and cancers
CC      associated with aberrant imprinting. The EG cell lines represent the
CC      first in vitro model system in which genomic imprinting can be followed
CC      dynamically and the two alleles can be distinguished. AAS20953-AAS20969
CC
XX      represent PCR primers described in the present invention
XX
XX      Sequence 20 BP; 1 A; 5 C; 6 G; 8 T; 0 U; 0 Other;
SQ
Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      176 GCTGCTGCTGCTGCTGCTG 194
      ||||| ||||| |||||
      2 GCTGCTGCTGCTGCTGCTG 20

RESULT 2510
ABQ93041
ID      ABQ93041 standard; DNA; 20 BP.
XX
XX
AC      ABQ93041;
XX
XX      29-AUG-2003 (revised)
XX
XX      21-OCT-2002 (first entry)
XX
XX      T. tauschii/wheat D genome microsatellite cfd257 left PCR primer.
DE
XX
XX      Microsatellite marker; wheat; D genome; mapping; genotyping;
KM      polymorphism; phenotypic trait; QTL; quantitative trait locus;
KM      disease-associated gene; development factor; quality factor;
KM      resistance factor; wheat product; identification; detection;
KM      genetically modified wheat; PCR; primer; ss.
XX
XX

```





Db 2 GCTGCTGCTGCTGCTTGTG 20

RESULT 2512  
ABK16404  
ID ABK16404 standard; DNA; 20 BP.

ABK16404;

14-MAR-2002 (first entry)

Mouse adipose protein, adp, PCR primer #10.

Adipose protein; ss; adp; obesity; transgenic animal; obesity;  
adipositas; bulimia; wasting; cachexia; eating disorder;  
body weight disorder; weight loss; cancer; infectious disease;  
hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;  
hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;  
gastrointestinal diseases; inflammatory bowel disease; PCR primer;  
ulcerative colitis; anorexia nervosa; glycogen storage disease;  
lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;  
infertility; acquired immunodeficiency syndrome; AIDS.

Mus musculus.

WO200196371-A2.

20-DEC-2001.

13-JUN-2001; 2001WO-EP006713.

16-JUN-2000; 2000US-0211914P.

23-JUN-2000; 2000EP-00113049.

28-JUN-2000; 2000US-0214518P.

17-APR-2001; 2001EP-00109537.

(DEVE-) DEVELOP GEN AG.

Bremer G, Ciosek T, Dohrmann C, Haeder T, Rothe M,

WPI; 2002-106464/14.

Novel nucleic acid encoding adipose polypeptide which regulates, causes  
or contributes to obesity, useful for treating obesity, heart disease,  
hypertension, infertility, and controlling weight loss in cancer  
patients.

Claim 1; Page 188; 188pp; English.

The invention relates to a nucleic acid encoding a adipose (ADP)  
polypeptide which regulates, causes or contributes to obesity in an  
animal or a human. The polynucleotides, proteins, ant-adp antibodies,  
modulators of adp activity, adp antisense nucleic acids, expression  
vectors, adp transgenic animals are useful in the diagnosis and treatment  
of obesity, adipositas, bulimia, wasting (cachexia), eating disorders  
and/or disorders of body weight/body mass, weight loss due to cancer or  
infectious diseases, genetic disorders associated with hypogonadism e.g.  
Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,  
diabetes, Cushing's syndrome, endocrine disorder, hypothyroidism,  
diseases, inflammatory bowel disease, ulcerative colitis, and anorexia  
nervosa. They are also useful for treating disorders of body weight/mass  
e.g. glycogen storage disease, and lipid storage diseases and for  
treating lipomas, and/or liposarcomas. The compositions are also useful  
for treating heart disease, hypertension, and infertility and for  
controlling conditions associated with under weight e.g. enhancing or  
controlling fertility, controlling weight loss in acquired  
immunodeficiency syndrome (AIDS) or cancer patients. The present sequence  
is a PCR primer used to amplify an adp nucleic acid

Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 4335 AATGTGCAAGAGATCTGGAG 4353

Db 2 AATGTGCAAGAGATCTGGAG 20

RESULT 2513

AB573496/c

ID AB573496 standard; DNA; 20 BP.

AB573496;

03-DEC-2002 (first entry)

Chimeric phosphorothioate oligonucleotide #77.  
Human; glioma-associated oncogene-2; antisense compound; infection;  
inflammation; tumour formation; antiinflammatory; antitumour;  
inhibitor of human glioma-associated oncogene-2 expression;  
antisense gene therapy; phosphorothioate; ss.

Homo sapiens.

Synthetic.

Chimeric.

US6440739-B1.

27-AUG-2002.

17-JUL-2001; 2001US-00907843.

17-JUL-2001; 2001US-00907843.

(ISIS-) ISIS PHARM INC.

Bennett CF, Freier SM;

WPI; 2002-697096/75.

Novel antisense compound that hybridizes and inhibits nucleic acid  
encoding human glioma-associated oncogene-2, useful for treatment of  
diseases associated with human glioma-associated oncogene-2.

Example 15; Col 47; 43pp; English.

The present invention relates to a new antisense compound targeted to  
human glioma-associated oncogene-2. The invention is useful for  
inhibiting the expression of human glioma-associated oncogene-2 in cells  
or tissues. The invention is also useful for treatment of diseases  
associated with human glioma-associated oncogene-2. The invention is  
further useful for diagnosis, therapeutics, prophylaxis, as research  
reagents and kits, for distinguishing functions of various members of a  
biological pathway, and in antisense gene therapy. The invention is also  
useful prophylactically, e.g., to prevent or delay infection,  
inflammation or tumour formation. The present nucleic acid sequence  
represents an oligonucleotide that was used in the methods of the  
invention to inhibit human glioma-associated oncogene-2

Sequence 20 BP; 4 A; 6 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2201 CTTGAAGGAAAGCTTT 2219

Db 19 CTTGAAGGAAAGGAAATT 1

RESULT 2514

ABX04382

```

ID ABX04382 standard; DNA; 20 BP.
XX
AC ABX04382;
XX
DT 13-JAN-2003 (first entry)
XX
DE Mouse Interleukin 5 receptor antisense oligonucleotide ISIS 16926.
XX
KM Mouse; 6s; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
XX immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Mus musculus.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PR 07-MAR-2001; 2001US-0080629.
XX
PR 26-MAR-1999; 99US-00280799.
XX 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karrae JG, McKay R, Manoharan M;
XX WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 23; Page 22; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targeting mouse IL-5 receptor
XX
SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3663 AACACAGGACCAATGNG 3681
DB 1 AACACAGGACCAATGNG 19
XX
RESULT 2515
ACCC86769
ID ACC86769 standard; DNA; 20 BP.
XX
AC ACC86769;
XX
XX 04-AUG-2003 (first entry)

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XX
DE Human VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:64.
XX
KM Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
KM inhibitor; cytostatic; antineumatic; antiarthritic; antiangiogenic;
KM antiinflammatory; antisense gene therapy; hyperproliferative disorder;
KM cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
KM tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; 6s.
XX
XX Homo sapiens.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2003022227-A2.
XX
PD 20-MAR-2003.
XX
PF 12-SEP-2002; 2002WO-US029148.
XX
PR 13-SEP-2001; 2001US-00953318.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Watt AT;
XX WPI; 2003-301004/29.
XX
PT New antisense oligonucleotide targeted to a nucleic acid encoding
PT vascular endothelial growth factor receptor-1, useful for diagnosing or
PT treating cancer, rheumatoid arthritis, or diseases or conditions
PT involving angiogenesis.
XX
PS Claim 3; Page 83; 150pp; English.
XX
CC The present invention describes a compound (C) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding vascular endothelial growth
CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
CC acid molecule encoding VEGFR-1. Also described: (1) a composition
CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
CC animal having a disease or condition associated with VEGFR-1 by
CC administering (C) to the animal so that the expression of VEGFR-1 is
CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
CC cytostatic and antiinflammatory activities, and can be used in antisense
CC gene therapy. The antisense compounds are useful for modulating the
CC expression of VEGFR-1 and for treating diseases or conditions associated
CC with the expression of VEGFR-1, such as hyperproliferative disorders
CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
CC angiogenesis. The antisense compounds are also useful for diagnostic,
CC therapeutic, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits, and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence represents a human VEGFR-2 chimeric
CC phosphorothioate antisense oligonucleotide, which is used in an example
XX from the present invention
XX
SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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XX PA (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
PI Miller S, Tang L, Shahabuddin S;
XX WPI, 2003-229219/22.
XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX PS Claim 15; SEQ ID NO 1311; 872pp; English.
XX
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cyostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 176 GCTGCTGCTGCTGCTGCTG 194
XX |||||
XX 2 GCTGCTGCTGCTGCTGCTG 20
XX
XX RESULT 2521
XX ABZ87427
XX ID ABZ87427 standard; DNA; 20 BP.
XX
XX AC ABZ87427;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.

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XX PA (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
PI Miller S, Tang L, Shahabuddin S;
XX WPI, 2003-229219/22.
XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX PS Disclosure; SEQ ID NO 2669; 872pp; English.
XX
XX CC The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cyostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2420 TTGGAATCCAAAGAGTC 2438
XX |||||
XX 2 TTCAATCCAAAGATGC 20
XX
XX RESULT 2522
XX ABZ86070
XX ID ABZ86070 standard; DNA; 20 BP.
XX
XX AC ABZ86070;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.

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XX (EPIC-) EPIGENESIS PHARM INC.  
PA Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX  
PS Claim 15; SEQ ID NO 1312; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. NO. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 167 GCTGCTGCGCTGCTGCTG 185  
DB 2 GCTGCGCGCCCTGCTGCTG 20  
XX  
RESULT 2523  
ABZ91335  
ID ABZ91335 standard; DNA; 20 BP.  
XX  
AC ABZ91335;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
OS WO200285308-A2.  
XX  
PN 31-OCT-2002.  
XX  
PD 23-APR-2002; 2002MO-US013135.  
XX  
PF 24-APR-2001; 2001US-0286137P.  
XX

XX (EPIC-) EPIGENESIS PHARM INC.  
PA Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX  
PS Disclosure; SEQ ID NO 6577; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. NO. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX  
QY 4070 GACTGTAGACACACAGCC 4088  
DB 2 GGCTGCAGACACACAGCC 20  
XX  
RESULT 2524  
ACF42722/c  
ID ACF42722 standard; DNA; 20 BP.  
XX  
AC ACF42722;  
XX  
DT 29-SEP-2003 (first entry)  
XX  
DE Human ALMS1 sequencing primer Ex4SBO1.  
XX  
XX Human; ALMS1; chromosome 2; 2p13; Alstrom disease; retinal dystrophy;  
XX cardiomyopathy; endocrinopathy; diabetes; Alstrom syndrome; cardiac;  
XX ophthalmological; antidiabetic; hepatotropic; nephrotropic; gene therapy;  
XX sequencing; primer; ss.  
XX  
XX Homo sapiens.  
XX  
OS Synthetic.  
XX  
OS WO2003034072-A2.  
XX  
PN 24-APR-2003.  
XX  
PD 15-OCT-2002; 2002MO-GB004658.  
XX  
PF 15-OCT-2001; 2001GB-00024621.  
XX  
PR 22-OCT-2001; 2001GB-00025318.  
XX

PR 07-JAN-2002; 2002GB-00000248.  
 PR 08-FEB-2002; 2002GB-00003039.  
 PR 08-FEB-2002; 2002GB-00003040.  
 XX  
 PA (UNSO-) UNIV SOUTHAMPTON.  
 XX  
 PI Wilson DI, Hearn T, Walker M;  
 XX  
 DR WPI; 2003-393556/37.  
 XX  
 PT Diagnosing the presence of, or susceptibility to, retinal dystrophy,  
 PT cardiomyopathy, endocrinopathy, diabetes, or Alstrom syndrome in an  
 PT individual, comprises detection or modulation of the ALMS1 protein or  
 PT gene region.  
 XX  
 PS Disclosure; Page 41; 121pp; English.  
 XX  
 CC The present invention describes a method of diagnosing the presence of,  
 CC or susceptibility to, retinal dystrophy, cardiomyopathy, endocrinopathy,  
 CC diabetes, or Alstrom syndrome in an individual. The method comprises  
 CC typing in a sample from the individual the ALMS1 protein or ALMS1 gene  
 CC region of the individual, or detecting aberrant ALMS1 activity. Human  
 CC ALMS1 is located to chromosome 2, more specifically to 2p13. ALMS1 has  
 CC ophtalmological, cardiac, antidiabetic, hepatotropic and nephrotropic  
 CC activities, and can be used in gene therapy. The method is useful for  
 CC diagnosing the presence of, or susceptibility to, retinal dystrophy,  
 CC cardiomyopathy, endocrinopathy (e.g. liver disease or renal impairment),  
 CC diabetes, or Alstrom syndrome in an individual. ALMS1 sequences can be  
 CC used in an agent that prevents or treats retinal dystrophy,  
 CC cardiomyopathy, endocrinopathy or diabetes is useful in manufacturing a  
 CC medicament for treating a patient who has been diagnosed as having or  
 CC being susceptible to retinal dystrophy, cardiomyopathy, endocrinopathy or  
 CC diabetes. AC942632 to AC942747 and ABR82113 to ABR82118 represent  
 CC sequences used in the exemplification of the present invention  
 XX  
 SQ Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 QY  
 Query Match  
 Best Local Similarity 0.1%; Score 15.8; DB 1; Length 20;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Db 4980 TCACTAAATTCGATGTC 4998  
 19 TCACTAACTTCGATGTC 1  
 RESULT 2525  
 ABD22299  
 ID ABD22299 standard; DNA; 20 BP.  
 AC ABD22299;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Human stannocalcin-derived oligo SEQ ID 1311.  
 XX  
 KW Human; antiense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX

PR 24-APR-2001; 2001US-0286036P.  
 XX  
 XX (EPIG-) EPIGENESIS PHARM INC.  
 PA  
 PI Myce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisease  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 1311; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cyostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;  
 QY  
 Query Match  
 Best Local Similarity 0.1%; Score 15.8; DB 1; Length 20;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Db 176 GCTGCTGCTGCTGCTGCTG 194  
 2 GCTGCTGCTGCTGCTGCTG 20  
 RESULT 2526  
 ABD22300  
 ID ABD22300 standard; DNA; 20 BP.  
 AC ABD22300;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Human stannocalcin-derived oligo SEQ ID 1312.  
 XX  
 KW Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 1312; 763pp; English.  
 XX  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 0 A; 8 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. NO. 1.6e+03;  
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Oy 167 GCTGCTGCTGCTGCTGCTG 185  
 |||||  
 Db 2 GCTGCTGCTGCTGCTGCTG 20  
 |||||  
 RESULT 2527  
 ABD23657  
 ID ABD23657 standard; DNA; 20 BP.

XX  
 AC ABD23657;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Human myosin X-derived oligonucleotide SEQ ID 2669.  
 XX  
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIG-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 2669; 763pp; English.  
 XX  
 XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX  
 SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;



Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
2420 TTTGAATCCAAAGAGTC 2438  
2 TTTCAATCCAAAGATGTC 20  
Db

RESULT 2528  
ABD27565  
ID ABD27565 standard; DNA; 20 BP.  
XX  
AC ABD27565;  
XX  
DT 29-JUL-2004 (first entry)  
XX  
DE AA50431-derived oligonucleotide SEQ ID 6577.  
XX  
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
PN WO200285309-A2.  
XX  
XX 31-OCT-2002.  
PD  
PF 23-APR-2002; 2002WO-US013143.  
XX  
PR 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
PA  
XX  
PI Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX  
DR WPI; 2003-093058/08.  
XX  
PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
PS Claim 15; SEQ ID NO 6577; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides; (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX

CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;  
XX

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
4070 GACTGTTAGACACACGCC 4088  
2 GGCTGTCAGACACACGCC 20  
Db

RESULT 2529  
ADJ16129  
ID ADJ16129 standard; DNA; 20 BP.  
XX  
AC ADJ16129;  
XX  
DT 20-MAY-2004 (first entry)  
XX  
DE Antisense DNA oligo used to modulate human LHR1 expression SeqID 679.  
XX  
KW human; ss; liver related homologue-1; LHR1; NR5A2; antisense;  
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
KW gall stone; triglyceridaemia; obesity; hepatitis;  
KW hepatocellular carcinoma; aromatase; cytostatic; anti-lipemic;  
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
KW antiinflammatory; virucidal.  
XX  
XX Homo sapiens.  
OS  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /label= OTHER= phosphorothioate backbone  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."  
FT modified\_base 15..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."  
XX  
PN WO2004003201-A2.  
XX  
XX 08-JAN-2004.  
XX  
XX 01-JUL-2003; 2003WO-US020865.  
XX  
XX 01-JUL-2002; 2002US-0392813P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Kane CD;  
XX  
XX WPI; 2004-083058/08.  
XX  
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver  
PT

```

PT related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
PS Example 15; SEQ ID NO 679; 909pp; English.
XX
CC This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      4959 TTCTTCAGCCTGCTTTCTG 4977
Db      2 TTCTTCAGCCTGCATCTG 20

RESULT 2530
ADJ15892
ID ADJ15892 standard; DNA; 20 BP.
XX
AC ADJ15892;
XX
DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 442.
XX
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidemia; atherosclerosis;
KW low HDL, high density lipoprotein; high LDL; hypercholesterolemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipemic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT

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PT cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2..
XX
XX 08-JAN-2004.
XX
XX 01-JUL-2003; 2003WO-US020865.
XX
XX 01-JUL-2002; 2002US-0392813P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-083058/08.
XX
XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS Example 15; SEQ ID NO 442; 909pp; English.
XX
CC This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      4959 TTCTTCAGCCTGCTTTCTG 4977
Db      1 TTCTTCAGCCTGCATCTG 19

RESULT 2531
ADJ23148
ID ADJ23148 standard; DNA; 20 BP.
XX
AC ADJ23148;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human endothelial lipase antisense oligonucleotide, SEQ ID 1546.
XX
XX Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
XX Human; Endothelial lipase; dyslipidemia; high density lipoprotein; HDL;
XX cardiovascular disorder; metabolic syndrome X; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers

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FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
XX WO2004009541-A2.
XX
XX 29-JAN-2004.
XX
XX 18-JUL-2003; 2003WO-US022410.
XX
XX 19-JUL-2002; 2002US-0397106P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Bhat BG;
XX
XX WPI; 2004-132912/13.
XX
XX New antisense oligonucleotide for modulating endothelial lipase
XX expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
XX high density lipoprotein or cardiovascular disorders.
XX
XX Claim 3; SEQ ID NO 1546; 1007bp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADJ21603-
XX ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
XX (ADJ25517), where the antisense oligonucleotide specifically hybridises
XX with and inhibits the expression of EL. The antisense oligonucleotides
XX are useful for modulating the expression of endothelial lipase in cells
XX or tissues to treat diseases associated with EL expression, such as
XX dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
XX disorder or metabolic syndrome X. In addition, the oligonucleotides are
XX used for diagnostics, prophylaxis, or as research reagents or kits.
XX
XX Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3517 AAGCAGAGCCGAGAGTGA 3535
DB 1 AAACGAGAGTCGAGAGTGA 19
RESULT 2532
ADJ22733
ID ADJ22733 standard; DNA; 20 BP.
XX
XX ADJ22733;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Human endothelial lipase antisense oligonucleotide, SEQ ID 1131.
DE
XX Antihypaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
XX Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
XX cardiovascular disorder; metabolic syndrome X; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
XX and 3' ends, which are 4 nucleotides in length. Also all
XX

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```

FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
XX WO2004009541-A2.
XX
XX 29-JAN-2004.
XX
XX 18-JUL-2003; 2003WO-US022410.
XX
XX 19-JUL-2002; 2002US-0397106P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Bhat BG;
XX
XX WPI; 2004-132912/13.
XX
XX New antisense oligonucleotide for modulating endothelial lipase
XX expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
XX high density lipoprotein or cardiovascular disorders.
XX
XX Claim 3; SEQ ID NO 1131; 1007bp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADJ21603-
XX ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
XX (ADJ25517), where the antisense oligonucleotide specifically hybridises
XX with and inhibits the expression of EL. The antisense oligonucleotides
XX are useful for modulating the expression of endothelial lipase in cells
XX or tissues to treat diseases associated with EL expression, such as
XX dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
XX disorder or metabolic syndrome X. In addition, the oligonucleotides are
XX used for diagnostics, prophylaxis, or as research reagents or kits.
XX
XX Sequence 20 BP; 11 A; 2 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3517 AAGCAGAGCCGAGAGTGA 3535
DB 2 AAACGAGAGTCGAGAGTGA 20
RESULT 2533
ADK74412/c
ID ADK74412 standard; DNA; 20 BP.
XX
XX ADK74412;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1746.
DE
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberts SL;
XX
XX WPI; 2004-203785/19.
XX

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PT New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.  
 XX  
 PS Claim 4; SEQ ID NO 1746; 417bp; English.  
 CC The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The  
 CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target  
 CC different regions of the human Nav1.3 RNA.  
 CC  
 SQ Sequence 20 BP; 0 A; 4 C; 3 G; 13 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 3467 CACAAAGAGAAAGAAAA 3485  
 Db 19 CACAGAGAAAGAAAGAAAA 1  
 RESULT 2534  
 ADK73800/c  
 ID ADK73800 standard; DNA; 20 BP.  
 XX  
 AC ADK73800;  
 XX  
 DT 20-MAY-2004 (first entry)  
 DE  
 XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1134.  
 DE  
 XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;  
 KM diabetic neuropathy; arthritic pain; migraine headache;  
 KM infantile epilepsy; ataxia; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO2004016754-A2.  
 XX  
 PD 26-FEB-2004.  
 XX  
 PF 14-AUG-2003; 2003WO-US025465.  
 XX  
 PR 14-AUG-2002; 2002US-0403416P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 PI Roberds SL;  
 XX  
 DR WPI; 2004-203785/19.  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.  
 XX  
 PS Claim 4; SEQ ID NO 1134; 417bp; English.  
 CC The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target  
 CC different regions of the human Nav1.3 RNA.  
 CC  
 SQ Sequence 20 BP; 0 A; 4 C; 1 G; 15 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 1.6e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 3468 ACAAGAGAGAAAGAAAA 3486  
 Db 20 ACAGAGAGAAAGAAAGAAAA 2  
 RESULT 2535  
 ADO61258  
 ID ADO61258 standard; DNA; 20 BP.  
 XX  
 AC ADO61258;  
 XX  
 DT 12-AUG-2004 (first entry)  
 DE  
 XX Human PPAR binding protein antisense oligonucleotide #57.  
 DE  
 XX endocrine; antisense therapy; antisense technology; PPAR binding protein;  
 KM peroxisome proliferator activated receptor binding protein;  
 KM gene expression inhibitor; PPAR binding protein associated disease;  
 KM metabolic disorder; diagnostic; prophylaxis; human;  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN US2004101855-A1.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 22-NOV-2002; 2002US-00304107.  
 XX  
 PR 22-NOV-2002; 2002US-00304107.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Bennett CF, Dobie KM;  
 XX  
 DR WPI; 2004-399683/37.  
 XX  
 XX New antisense oligonucleotides for modulating PPAR binding protein  
 PT expression, useful for diagnosing, preventing or treating conditions  
 PT associated with aberrant PPAR binding protein expression e.g. metabolic



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XX 24-JUN-2004.
PD
XX
XX 06-OCT-2003; 2003US-00679532.
PF
XX
XX 26-MAR-1999; 99US-00280799.
PR
XX 17-MAR-2000; 2000WO-US007318.
PR
XX 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N. M.
PA (KARR/) KARRAS J. G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
PI Dean NM, Karrae JG, Mckay R, Manoharan M;
PI WPI; 2004-479665/45.
XX
XX New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
XX Example 23; SEQ ID NO 81; 77pp; English.
XX
XX The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterized by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a murine IL-5 receptor a DNA antisense
CC oligonucleotide of the invention.
XX
XX Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 3663 AACACAGCACCATGTAG 3681
Db 1 AACACAGCACCATGTAG 19
RESULT 2538
ADS97343
ID ADS97343 standard; DNA; 20 BP.
XX
XX ADS97343;
AC
XX
XX 02-DEC-2004 (first entry)
DT
XX
XX Mouse p38 MAPK alpha antisense oligonucleotide ISIS 320149.
DE
XX
XX Mouse; ss; p38 MAPK; mitogen activated protein kinase; arthritis;
KM apoptosis; ischemic heart disease; AIDS; airway hyper-responsiveness;
KM pulmonary inflammation; asthma; antisense.
XX

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OS Mus musculus.
XX
XX US2004171566-A1;
XX
XX 02-SEP-2004.
PD
XX
XX 15-AUG-2003; 2003US-00641455.
PF
XX
XX 06-APR-1999; 99US-00286904.
PR
XX 15-AUG-2000; 2000US-00640101.
PR
XX 09-SEP-2002; 2002US-00238442.
XX
XX (MONT/) MONTA B. P.
XX (GAAR/) GAARDE W. A.
XX (NERO/) NERO P.
XX (MCKA/) MCKAY R.
XX (WONG/) WONG W. S. F.
XX
XX Monia BP, Gaarde WA, Nero P, Mckay R, Wong WSF;
XX WPI; 2004-634559/61.
XX
XX Treatment of airway hyper-responsiveness or pulmonary inflammation
PT comprises administering antisense compound having predetermined number of
PT nucleobases targeted to nucleic acid encoding human p38 alpha mitogen-
PT activated protein kinase.
XX
XX Example 12; SEQ ID NO 226; 106pp; English.
XX
XX The invention relates to treating airway hyper-responsiveness or
CC pulmonary inflammation in an individual comprising administering an
CC antisense compound 8-30 nucleobases in length targeted to a nucleic acid
CC molecule encoding a human p38alpha mitogen-activated protein (MAP) kinase
CC to the individual. Also included is a pharmaceutical composition
CC comprising the antisense oligonucleotide in a formulation suitable for
CC intranasal, intrapulmonary or intratracheal administration. Also
CC disclosed are antisense oligonucleotides targeting p38 MAPK beta. The
CC method is useful for treating airway hyper-responsiveness or pulmonary
CC inflammation associated with asthma. The invention provides treatment and
CC diagnosis of diseases through modulation of expression of a gene encoding
CC a p38 mitogen-activated protein kinase. Other diseases associated with
CC p38 MAPK are arthritis, ischemic heart disease (via prevention of
CC apoptosis of cardiac myocytes) and AIDS. The present sequence is a p38
CC MAPK targeting antisense oligonucleotides of the invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 1.6e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 3827 AATGAGCTCATGGCTTCAG 3845
Db 1 AATGAGCTCATGGCTTCAG 19
RESULT 2539
AAT1203/c
ID AAT1203 standard; DNA; 21 BP.
XX
XX AAT1203;
AC
XX
XX 03-DEC-1996 (first entry)
DT
XX
XX Human gene signature HUMGS01069-derived sense primer.
DE
XX
XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KM human; cloning; mapping; non-biased library; diagnosis; detection;
KM cell typing; abnormal cell function; primer; PCR; amplification;
KM polymerase chain reaction; ss.
XX
XX Synthetic.
XX

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PN W09514772-A1.
XX
XX 01-JUN-1995.
XX
XX 11-NOV-1994; 94WO-JP001916.
XX
XX 12-NOV-1993; 93JP-00355504.
XX
XX (MATSU/) MATSUBARA K.
XX (OKUBO/) OKUBO K.
XX
XX Matsubara K, Okubo K;
XX
XX WPI; 1995-206931/27.
XX
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX
XX Example 7; Fig 8; 2245pp; Japanese.
XX
XX Primers T41001-T41382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative
XX abundance of different mRNAs in the particular tissue from which it was
XX derived. The appearance frequency of a given GS in a cDNA library can be
XX determined (esp. using primers and probes derived from the GS sequences)
XX as a means of diagnosing abnormal cell function or for recognising
XX different cell types. The primers T41203-4 amplify clone pm1879 which
XX comprises the GS HDWGS001069 (T20069), located on chromosome 20
XX
XX Sequence 21 BP; 5 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.7e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1256 CATCACTTTACAGCCTTG 1274
Db 20 CATCACTTTACAGCATG 2
RESULT 2540
AAA13030/C
ID AAA13030 standard; DNA; 21 BP.
XX
XX AAA13030;
XX
XX 14-JUL-2000 (first entry)
XX
XX Urease gene antisense oligonucleotide #8.
XX
XX Antisense oligonucleotide; Helicobacter pylori; urease; treat; diagnose;
XX inhibit translation; cell wall biosynthesis; ribosomal RNA; ss;
XX ribosomal protein; pathogenicity; nutrient uptake; bacterial infection.
XX
XX Helicobacter pylori.
XX
XX W0200015265-A1.
XX
XX 23-MAR-2000.
XX
XX 15-SEP-1999; 99WO-US021950.
XX
XX 16-SEP-1998; 98US-0100591P.
XX 16-SEP-1998; 98US-0100598P.
XX 16-SEP-1998; 98US-0100599P.
XX 16-SEP-1998; 98US-0100625P.
XX
XX (VITA-) VITAGENIX INC.

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XX
XX Selfert W;
XX
XX WPI; 2000-271267/23.
XX
XX New antisense oligonucleotide, useful for treating and diagnosing
XX bacterial infections, interacts with and inhibits translation of a target
XX RNA sequence in bacteria.
XX
XX Claim 9; Page 28; 50pp; English.
XX
XX This sequence represents an antisense oligonucleotide that targets the
XX Helicobacter pylori urease gene. The H. pylori urease gene is involved in
XX the mechanisms which enable H. pylori to survive at a very acidic pH. The
XX invention relates to antisense oligonucleotides (e.g. the present
XX sequence) which interact with and inhibit translation of a target RNA
XX sequence in a bacterium. The RNA sequences that the oligonucleotides
XX target encode proteins such as enzymes for biosynthesis of cell wall
XX proteins, ribosomal RNA, ribosomal proteins, proteins essential for
XX nutrient uptake, proteins associated with pathogenicity, subunits of DNA-
XX dependent RNA polymerase, and DNA polymerase. The antisense
XX oligonucleotides are used to treat or diagnose bacterial infections
XX
XX Sequence 21 BP; 4 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1.7e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2202 TTGGAGGAAAGGCTTTG 2220
Db 20 TTGGAGGAAAGGCAATG 2
RESULT 2541
AAZ93989
ID AAZ93989 standard; DNA; 21 BP.
XX
XX AAZ93989;
XX
XX 29-AUG-2000 (first entry)
XX
XX Sequencing primer (AS5) used to sequence mouse uromodulin promoter.
XX
XX Uromodulin; promoter; kidney; urine; heterologous gene; treatment;
XX therapy; gene expression; pharmaceutical; primer; ss.
XX
XX Synthetic.
XX
XX W0200029608-A1.
XX
XX 25-MAY-2000.
XX
XX 12-NOV-1999; 99WO-US026870.
XX
XX 13-NOV-1998; 98US-0109195P.
XX 09-JUL-1999; 99US-0142925P.
XX
XX (UANY ) UNTV NEW YORK STATE.
XX
XX Wu X, Sun T;
XX
XX WPI; 2000-387816/33.
XX
XX New kidney-specific promoter useful for production of transgenic animals
XX as urinary bioreactors, is operably linked to a heterologous gene.
XX
XX Example 1; Page 20; 55pp; English.
XX
XX New methods to produce heterologous recombinant proteins in urine require
XX the use of a DNA molecule which is a kidney-specific promoter, such as
XX the uromodulin promoter, operably linked to a heterologous gene encoding
XX a biologically active protein. The uromodulin promoter expresses the

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heterologous gene in vivo in the kidneys to produce a recombinant biologically active protein in the urine. The recombinant proteins produced may be useful for treating human diseases. The major advantages of using this urine-based system over milk-based systems are the ability to harvest the product soon after birth and throughout the life of the animal irrespective of sex or reproductive status, and the ease of product purification from urine. In addition, livestock urine is a proven, currently utilized source of pharmaceuticals. Thirteen primers (AA293960-92) were used to sequence the entire mouse uromodulin promoter using a genomic walking method

Sequence 21 BP; 6 A; 3 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 1.7e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3197 GAGAGAGACAGACCTTG 3215  
 |||||  
 Db 3 GGGAGAGACAAAGCCTTG 21

RESULT 2542

AAH62597  
 ID AAH62597 standard; DNA; 21 BP.

AC AAH62597;

DT 09-SEP-2004 (revised)  
 DT 12-SEP-2001 (first entry)

DE CHRNA7 polymorphism containing DNA fragment #498.

KM Single nucleotide polymorphism; SNP; human; cancer; inflammation;  
 KW heart disease; paternity testing; forensic science; ds.

OS Homo sapiens.  
 OS Unidentified.

Key Location/Qualifiers  
 FT 11  
 FT variation

/\*tag= a  
 /standard\_name= "single nucleotide polymorphism"

PN MO200138576-A2.

PD 31-MAY-2001.

PF 17-NOV-2000; 2000MO-US031639.

PR 24-NOV-1999; 99US-0167334P.

PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.

PI Cargill M, Ireland JS, Lander ES;

DR WPI; 2001-367705/38.

New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.

PS Claim 1; Page 69; 80pp; English.

XX DNA sequences AAH62100 - AAH62688 represent segments of human genes which  
 CC contain single nucleotide polymorphisms (SNPs). A method is included in  
 CC the invention for analysing a nucleic acid sample, which consists of  
 CC determining the base occupying any one of the polymorphic sites given in  
 CC the SNP containing sequences. The nucleotide sequences can be used in the  
 CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart  
 CC diseases, diseases of the cardiovascular system, and infection by  
 CC microorganisms. The oligonucleotides are also useful in the manufacture  
 CC of a medicament for the treatment or prophylaxis of the diseases, and as

CC a pharmaceutical. SNP containing oligonucleotides are useful in  
 CC applications such as phenotype correlation, forensics, paternity testing,  
 CC medicine and genetic analysis

CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key

XX Sequence 21 BP; 1 A; 6 C; 8 G; 6 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 1.7e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 179 GCTGCTGCTGCTGCTGAGC 197  
 |||||  
 Db 2 GCTGCTGCTGCTGCTGAGG 20

RESULT 2543

ABL51705  
 ID ABL51705 standard; DNA; 21 BP.

AC ABL51705;

DT 08-JUL-2002 (first entry)

DE Human GFRalpha4 PCR primer SEQ ID NO:47.

KM GFRalpha4; glycosyl-phosphatidylinositol; GPI; GDNF; cytosolic;  
 KW glycosyl-phosphatidylinositol-linked GDNF family alpha-receptor;  
 KW glial cell line derived neurotrophic factor; osteopathic; tumour;  
 KW neuroprotective; anticonvulsant; neoplasia; endocrine tumour;  
 KW medullary thyroid carcinoma; pheochromocytoma; parathyroid hyperplasia;  
 KW neuronal disorder; aberrant axonal sprouting; PCR primer; ss.

OS Homo sapiens.

PN MO200162795-A1.

PD 30-AUG-2001.

PF 14-NOV-2000; 2000MO-FI000994.

PR 21-FEB-2000; 2000FI-00000394.

PA (LICE-) LICENTIA LTD.

PI Airaksinen M, Saarma M, Poterbaev D, Lindahl M, Timmusk T;

DR WPI; 2001-596722/67.

XX New nucleic acid sequence for manufacturing polypeptides for treating  
 CC endocrine cancers comprises a cDNA encoding a splicing isoform of  
 CC mammalian growth factor receptor (GFR) alpha4.

PS Example 8; Page 62; 143pp; English.

XX The present invention describes an isolated and purified cDNA sequence  
 CC encoding a splicing isoform of a mammalian growth factor receptor  
 CC (GFR) alpha4, or its fragments. GFRalpha4 sequences have cytosolic,  
 CC osteopathic, neuroprotective and anticonvulsant activities. GFRalpha4 is  
 CC a glycosyl-phosphatidylinositol (GPI)-linked glial cell line-derived  
 CC neurotrophic factor (GDNF) family alpha-receptor. A GFRalpha4  
 CC polynucleotide sequence can be used for recording GFRalpha4 mediated  
 CC signalling in neurons or endocrine cells such as thyroid calcitonin-  
 CC producing C-cells, parathyroid gland cells, adrenal chromaffin cells, or  
 CC cells from the pituitary intermediate lobe. GFRalpha4 protein and  
 CC polynucleotide sequences can be used for manufacturing polypeptides  
 CC useful for diagnosing and/or treating tumours in parathyroid gland cells,  
 CC adrenal chromaffin cells, cells of pituitary intermediate lobe,  
 CC pheochromocytoma, parathyroid hyperplasia, neuronal disorders or for  
 CC preventing neuronal death or aberrant axonal sprouting. The present



CC Sequence represents a PCR primer for human GFRA1p4, which is used in an  
CC example from the present invention  
XX  
SQ Sequence 21 BP; 4 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match	0.1%	Score 15.8	DB 1	Length 21
Best Local Similarity	89.5%	Pred. No. 1.7e+03		
Matches 17	Conservative 0	Mismatches 2	Indels 0	Gaps 0
QY	1827 AGGAGTCTTTCACAGGCGAG	1845		
Db	3 AGGTGTCTCTCCACAGGCGAG	21		

CC represent mutant gamma-aminobutyric acid receptor subunit coding  
CC sequences and PCR primers of the invention  
XX  
SQ Sequence 21 BP; 2 A; 4 C; 7 G; 8 T; 0 U; 0 Other;

```

Query Match          0.1%   Score 15.8;   DB 1;   Length 21;
Best Local Similarity 89.5%   Pred. No. 1.7e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      4450 AAAAATTGGAACACCC 4468
      |||||
Db       19 AAAGCTTGGAACCAACC 1

```

CC	mechanism of the induction of a GABA receptor, to study the	Query Match	0.1%	Score 15.8	DB 1	Length 21
CC	mechanism of the disease as related to GABA receptor, for the creation of	Best Local Similarity	89.5%	Prod. No. 1.7e+03		
CC	explanted mammalian cultures which express a mutant GABA receptor and for	Matches 17	0	Mismatches 2		Indels 0
CC	the evaluation of potential therapeutic interventions. ABR27332-ABR27399					Gaps 0

Oy 1265 ACAAGCCTTGCTCAGTGT 1283  
 Db 21 ACAAGCCTTGCTCAGTGT 3

## RESULT 2546

ID ADO48423/c  
 AD048423 standard; DNA; 21 BP.

XX ADO48423;

XX 29-JUL-2004 (first entry)

DE CDNA amplification method associated primer #66.

XX CDNA generation; non-replicable element; in vitro replication;

KW 1,3 propane diol molecly; primer; ss; Beta-globin.

XX Synthetic.

PN US2004091923-A1.

PD 13-MAY-2004.

PF 06-OCT-2003; 2003US-00680341.

PR 23-JUL-1993; 93US-00095442.

PR 02-APR-1997; 97US-00825532.

PR 11-JAN-1999; 99US-00228324.

PR 07-APR-2000; 2000US-00544773.

XX (BIRA ) BIO-RAD LAB INC.

PI Reyes AA, Wallace RB, Ugozzoli LA;

XX WPI; 2004-374946/35.

PT Generating CDNA molecules using a linked series of multi-cycle primer  
 PT extension reactions, useful for the in vitro replication of nucleic  
 PT acids, in particular for replicating a nucleic acid sequence of interest  
 PT in large quantities.

XX Example 11; SEQ ID NO 70; 54pp; English.

CC The invention describes a process for generating a CDNA molecule from an  
 CC RNA molecule. The method comprises annealing a first primer containing a  
 CC non-replicable element, to an RNA molecule, generating a first strand  
 CC product, separating the first CDNA from its template to produce single  
 CC stranded molecules, annealing a second primer containing a non-replicable  
 CC element, to the first CDNA product, and generating a second CDNA product  
 CC that is a complement of the first CDNA. The first and second primers in  
 CC the process cited above is with or without a cleavable element. The  
 CC methods and compositions are useful for the in vitro replication of  
 CC nucleic acids, in particular for replicating a nucleic acid sequence of  
 CC interest, with large quantities of the desired sequence ultimately  
 CC resulting from the linkage of extension reactions where the sequence of  
 CC interest accumulates in a mathematically linear fashion. This sequence  
 CC represents a non-replicable 1,3 propane diol molecly containing human beta  
 CC -globin primer used in the CDNA amplification method of the invention.

XX Sequence 21 BP; 5 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 1.7e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 2832 AACACCACTTCTTCACG 2850

Db 21 ACCACCACTTCATCCAG 3

## RESULT 2547

ADRE8116

ID ADRE8116 standard; DNA; 21 BP.  
 XX ADRE8116;

DT 18-NOV-2004 (first entry)

DE BAF6 siRNA sense strand DNA, SEQ ID 127.

XX Antiatheritic; Antirheumatic; Muscular; Neuroprotective;

KW Antiinflammatory; Antipapillary; Gastrointestinal; Antiallergic;

KW Dermatological; Antitumor; Vasodilator; Antialastmatic; Immunosuppressive;

KW Antidiabetic; cancer; B cell activation factor; BAF6;

KW small interfering RNA; siRNA; systemic anaphylaxis;

KW hypersensitivity response; allergy; multiple sclerosis;

KW systemic lupus erythematosus; diabetes; graft rejection; ds.

XX Synthetic.

PN WO2004074511-A1.

PD 02-SEP-2004.

PF 20-FEB-2004; 2004WO-AU000215.

PR 21-FEB-2003; 2003US-0449037P.

XX (GARY-) GARVAN INST MEDICAL RES.

PI Mackay F, Mackay C, Batten M;

XX WPI; 2004-652968/53.

PT Determining cancer cell or predisposition to developing cancer in subject  
 PT candidate for anti-tumor necrosis factor therapy, by determining level  
 PT of expression of B cell activation factor gene in sample of subject.

PS Claim 66; SEQ ID NO 127; 148pp; English.

CC The present invention relates to a method for determining predisposition  
 CC to developing cancer in subject, particularly for a subject having anti-  
 CC tumor necrosis factor (TNF) therapy. The method comprises determining  
 CC the expression level of B cell activation factor (BAFF) gene in a sample,  
 CC where elevated expression of BAFF gene relative to its level of  
 CC expression in healthy subject is indicative of predisposition to  
 CC developing cancer. Also claimed are small interfering RNA (siRNA)  
 CC molecules (ADRE7998-ADRE8125) which antagonizes the expression of a BAFF  
 CC gene. The siRNAs are useful in a method for preventing or delaying the  
 CC development of a cancer in a subject. The invention is also useful for  
 CC treating or preventing diseases such as systemic anaphylaxis or  
 CC hypersensitivity responses, drug allergies (e.g. to penicillin,  
 CC cephalosporins), insect sting allergies, inflammatory dermatoses (e.g.  
 CC dermatitis, eczema, atopic dermatitis, allergic contact dermatitis),  
 CC vasculitis (e.g. necrotizing, cutaneous and hypersensitivity vasculitis),  
 CC respiratory allergic diseases (e.g. asthma, allergic rhinitis,  
 CC interstitial lung diseases), multiple sclerosis, systemic lupus  
 CC erythematosus, diabetes, graft rejection, etc.

XX Sequence 21 BP; 6 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.8; DB 1; Length 21;

Best Local Similarity 89.5%; Pred. No. 1.7e+03;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 2827 AGATGAACCAACTTCTT 2845

Db 3 AGATGAACCTCAACTTGT 21

## RESULT 2548

ADRE83282

ADRE83282;

```
XX 02-DEC-2004 (first entry)
XX
XX Human protection of telomeres 1 miRNA target region.
DE
XX human; ss; miRNA; microRNA; ontogenesis; cell therapy; cancer;
XX immune disease; nerve disorder; amyotrophic lateral sclerosis;
XX Parkinson's disease; Alzheimer's disease; inflammatory disease;
XX siRNA silencing precursor; cytosolic; immunosuppressive; neurotropic;
XX neuroprotective; antiinflammatory; immunotherapy;
XX protection of telomeres 1.
XX
XX Homo sapiens.
XX
XX WO2004076622-A2.
XX
XX 10-SEP-2004.
XX
XX 10-FEB-2004; 2004WO-JP001433.
XX
XX 10-FEB-2003; 2003US-0445829P.
XX
XX (NNAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX
XX Taira K, Kawasaki H;
XX
XX WPI; 2004-653393/63.
XX
XX Modulating expression of a target gene in a cell, for treating cancer, an
XX immune disease, or a nerve disorder, comprises introducing into the cell
XX a polynucleotide that forms a duplex region with an mRNA transcribed from
XX the target gene.
XX
XX Claim 2; SEQ ID NO 184; 865bp; English.
XX
XX This invention relates to a novel method for modulating the expression of
XX a target gene in a cell. Specifically, it refers to the introduction into
XX of a polynucleotide that forms a duplex region with an mRNA
XX transcribed from the target gene, where the duplex region comprises a
XX mammalian miRNA target region i.e. a non-coding microRNA (miRNA) that
XX regulates mRNA at a post-transcriptional level. The present invention
XX describes a method for controlling ontogenesis of a mammal, function of a
XX mammalian cell, differentiation of a mammalian cell or viability of a
XX mammalian cell in the post-transcriptional phase, which comprises
XX introducing a plasmid vector comprising a promoter and nucleic acid
XX molecule expressing an miRNA or siRNA silencing precursor to the miRNA.
XX Accordingly, it provides a cell therapy method for treating cancer,
XX immune disease, nerve disorder (e.g. amyotrophic lateral sclerosis,
XX Parkinson's disease, or Alzheimer's disease) or an inflammatory disease
XX by introducing into the cell the miRNA, siRNA silencing precursor to the
XX miRNA or the plasmid vector. As such, they can be developed into
XX pharmaceutical compositions that exhibit cytostatic, immunosuppressive,
XX neurotropic, neuroprotective and antiinflammatory activities and hence can
XX be used for immunotherapy. This oligonucleotide sequence is a human miRNA
XX target region derived from a target gene of the invention.
XX
XX Sequence 21 BP; 4 A; 3 C; 4 G; 0 T; 10 U; 0 Other:
XX
XX Query Match 0.1%; Score 15.8; DB 1; Length 21;
XX Best Local Similarity 52.6%; Pred. No. 1.7e+03;
XX Matches 10; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
OY 2254 GATTTTCCGACAGGTGT 2272
DB 2 GAUUUUACUGACAGUGU 20
RESULT 2549
AAA22602/c
ID AAA22602 standard; RNA; 17 BP.
AC AAA22602;
XX
```

```
DT 19-JUN-2000 (first entry)
XX
XX Integrin subunit beta 3 substrate sequence SEQ ID NO:5828.
DE
XX Human; aryl hydrotocarbon nuclear transport; ARNT; Tie-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipneumatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiodiroma;
XX tubercus sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Oster-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Moswigen JA;
XX
XX WPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 54; Page 230; 305bp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrotocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT.
XX Integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiodiroma of tubercus sclerosis, pot-wine stain, Sturge Weber
XX syndrome, Kippel-Trenaunay-Weber syndrome, Oster-Weber-Rendu syndrome,
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX integrin subunit alpha-6, or integrin subunit beta-3.
XX
XX Sequence 17 BP; 0 A; 3 C; 0 G; 0 T; 14 U; 0 Other:
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 3470 AAAGGAGGAGGAGGAGGAGG 3486
DB 17 AAAGGAGGAGGAGGAGGAGG 1
RESULT 2550
```

ABA77557/c  
ID ABA77557 standard; DNA; 17 BP.  
XX  
AC ABA77557;  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 403.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CPTX; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytosolic; antistickling; antianaemic; haemostatic;  
KW antileptic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
XX  
PR 27-MAR-2000; 2000US-0192179P.  
XX  
PR 01-JUN-2000; 2000US-0208538P.  
XX  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
PI Kmiec EB, Gamper HB, Rice MC;  
XX  
DR WPI; 2001-639230/73.  
XX  
PT Oligonucleotide for targeted alterations of genetic sequences and for  
PT treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
XX  
PS Claim 7; Page 67; 294pp; English.  
XX  
CC The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CPTX, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolemia, thalassemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 3 A; 1 C; 8 G; 5 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2834 CACCACTTCTTCACG 2850  
|||||  
DB 17 CACCACTTCATCCACG 1

RESULT 2551  
ABA77558  
ID ABA77558 standard; DNA; 17 BP.  
XX  
AC ABA77558;  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 404.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CPTX; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytosolic; antistickling; antianaemic; haemostatic;  
KW antileptic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
XX  
PR 27-MAR-2000; 2000US-0192179P.  
XX  
PR 01-JUN-2000; 2000US-0208538P.  
XX  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
PI Kmiec EB, Gamper HB, Rice MC;  
XX  
DR WPI; 2001-639230/73.  
XX  
PT Oligonucleotide for targeted alterations of genetic sequences and for  
PT treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
XX  
PS Claim 7; Page 67; 294pp; English.  
XX  
CC The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CPTX, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolemia, thalassemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 5 A; 8 C; 1 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2834 CACCACTTCTTCACG 2850  
|||||  
DB 1 CACCACTTCATCCACG 17

```

RESULT 2552
ABL46750/C
ID ABL46750 standard; RNA; 17 BP.
XX
AC ABL46750;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human GRID NCH ribozyme substrate oligonucleotide #204.
XX
KW Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytosolic; ss.
XX
OS Homo sapiens.
XX
PN WO200162911-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-US005957.
XX
PR 24-FEB-2000; 2000US-0184594P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlwiltz I, Moswigen JA, Hamblin PA, Ellis JH;
XX WPI; 2001-550088/61.
XX
DR New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT (GRID) gene comprises using antisense and enzymatic nucleic acid
XX molecules such as hammerhead ribozymes.
XX
PS Claim 4; Page 66; 108pp; English.
XX
CC The present invention relates to oligonucleotides that downregulate the
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC a 1-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC for modulating the expression of GRID, to treat conditions such as
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC administered in conjunction with other therapies such as radiation,
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC used to illustrate the invention.
XX
SQ Sequence 17 BP; 4 A; 7 C; 5 G; 0 T; 1 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 179 GCTGCTGCTGCTGCTG 195
Db 17 GCTGCTGAGGCTGCTG 1
XX
RESULT 2553
ADB03682/C
ID ADB03682 standard; DNA; 17 BP.
XX
AC ADB03682;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD27 scanning oligonucleotide SEQ ID 4668.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX

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OS Homo sapiens.
XX
BN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
DR New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
PS Example 8; SEQ ID NO 4668; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder,
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1188 GAGCTGAGAGGCTGCTG 1204
Db 17 GAGCTGAGGCGCTCTG 1
XX
RESULT 2554
ACC66998/C
ID ACC66998 standard; DNA; 17 BP.
XX
AC ACC66998;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 4245.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN MO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX

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PR 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
PI Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 527; 738bp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC68806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia.
XX
SQ Sequence 17 BP; 6 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3701 CAATTTCCTGTGATC 3717
DB 17 CAATTTCCTGTGATC 1

RESULT 2555
ADB41910/c
ID ADB41910 standard; DNA; 17 BP.
XX
XX ADB41910;
AC
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #2233.
DE
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KM primer; probe; tumour suppression; tumour reversion; apoptosis;
KM virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KM diagnosis.
XX
XX Homo sapiens.
OS
XX WO2003040369-A2.
PN
XX 15-MAY-2003.
PD
XX 17-SEP-2002; 2002WO-IB004219.
XX
XX 17-SEP-2001; 2001FR-00011981.
PR
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
XX Telerman A, Amson R, Tuijnder M;
PI
XX WPI; 2003-441574/41.
XX
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
XX Disclosure; Page 293; 771pp; French.

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XX
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides; a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and/or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
XX
SQ Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.4e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3523 AACCCGAGAGTGAGATC 3539
DB 17 AACCCGAGAGTGAGATC 1

RESULT 2556
ADC37823/c
ID ADC37823 standard; DNA; 17 BP.
XX
XX ADC37823;
AC
XX 18-DEC-2003 (first entry)
DT
XX
XX Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO.172.
DE
XX human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;
KM AMLP1a; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
XX
XX WO2003037931-A2.
PN
XX 08-MAY-2003.
PD
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
PR
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
PA
XX Shannon M, Phan T;
PI
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiomotin-like
PT protein, useful for treating or preventing a disorder associated with
PT decreased or increased expression or activity of AMLP1.
XX
XX Example 2; SEQ ID NO 172; 172pp; English.
XX
XX The present invention describes the human angiomotin-like protein 1
CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
CC compositions of the present invention can be used for treating or

```

CC preventing a disorder associated with decreased or increased expression  
CC or activity of AMLP1. The present sequence represents a scanning  
CC oligonucleotide for human AMLP1a, which is used in an example from the  
CC present invention.

SO Sequence 17 BP; 7 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 GCTGCTGCTGCTGCTGCT 193  
Db 17 CTGCTGCTGCTGCTGCT 1

RESULT 2557  
ADC37821/C  
ID ADC37821 standard; DNA; 17 BP.

AC ADC37821;

DT 18-DEC-2003 (first entry)

DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:170.

KW human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;

KM AMLP1a; ss.

OS Synthetic.

OS Homo sapiens.

PN WO2003037931-A2.

PS 08-MAY-2003.

PF 01-NOV-2002; 2002WO-US035129.

PR 01-NOV-2001; 2001US-0334773P.

PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.

PI Shannon M, Phan T;

DR WPI; 2003-430501/40.

PT New isolated nucleic acid molecule encoding a human angiomotin-like  
PT protein, useful for treating or preventing a disorder associated with  
PT decreased or increased expression or activity of AMLP1.

PS Example 2; SEQ ID NO 170; 172pp; English.

CC The present invention describes the human angiomotin-like protein 1  
CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene  
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and  
CC compositions of the present invention can be used for treating or  
CC preventing a disorder associated with decreased or increased expression  
CC or activity of AMLP1. The present sequence represents a scanning  
CC oligonucleotide for human AMLP1a, which is used in an example from the  
CC present invention.

SO Sequence 17 BP; 6 A; 6 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGC 192  
Db 17 GCTGCTGCTGCTGCTGC 1

RESULT 2558

ADC37818/C  
ID ADC37818 standard; DNA; 17 BP.

AC ADC37818;

DT 18-DEC-2003 (first entry)

DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:167.

KW human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;

KM AMLP1a; ss.

OS Synthetic.

OS Homo sapiens.

PN WO2003037931-A2.

PS 08-MAY-2003.

PF 01-NOV-2002; 2002WO-US035129.

PR 01-NOV-2001; 2001US-0334773P.

PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.

PI Shannon M, Phan T;

DR WPI; 2003-430501/40.

PT New isolated nucleic acid molecule encoding a human angiomotin-like  
PT protein, useful for treating or preventing a disorder associated with  
PT decreased or increased expression or activity of AMLP1.

PS Example 2; SEQ ID NO 167; 172pp; English.

CC The present invention describes the human angiomotin-like protein 1  
CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene  
CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and  
CC compositions of the present invention can be used for treating or  
CC preventing a disorder associated with decreased or increased expression  
CC or activity of AMLP1. The present sequence represents a scanning  
CC oligonucleotide for human AMLP1a, which is used in an example from the  
CC present invention.

SO Sequence 17 BP; 6 A; 6 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.4e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGC 192  
Db 17 GCTGCTGCTGCTGCTGC 1

RESULT 2559

ADC37819/C  
ID ADC37819 standard; DNA; 17 BP.

AC ADC37819;

DT 18-DEC-2003 (first entry)

DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:168.

KW human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;

KM AMLP1a; ss.

OS Synthetic.

OS Homo sapiens.

PN WO2003037931-A2.

XX

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PD 08-MAY-2003.
XX
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
XX Shannon M, Phan T;
XX
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiominotin-like
XX protein, useful for treating or preventing a disorder associated with
XX decreased or increased expression or activity of AMLP1.
XX
XX Example 2; SEQ ID NO 168; 172pp; English.
XX
XX The present invention describes the human angiominotin-like protein 1
XX (AMLPI). human AMLPI has cytostatic activity, and can be used in gene
XX therapy. The AMLPI protein, nucleic acid molecules, antibodies, and
XX compositions of the present invention can be used for treating or
XX preventing a disorder associated with decreased or increased expression
XX or activity of AMLPI. The present sequence represents a scanning
XX oligonucleotide for human AMLPIa, which is used in an example from the
XX present invention.
XX
XX Sequence 17 BP; 7 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 178 TGCTGCTGCTGCTGCTG 194
Db 17 TGCTGTTGCTGCTGCTG 1

RESULT 2560
ADC37820/c
XX ADC37820 standard; DNA; 17 BP.
XX
XX ADC37820;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human AMLPIa scanning 17-mer oligonucleotide SEQ ID NO:169.
XX
XX human; angiominotin-like protein 1; AMLPI; cytostatic; gene therapy;
XX AMLPIa; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO2003037931-A2.
XX
XX 08-MAY-2003.
XX
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
XX Shannon M, Phan T;
XX
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiominotin-like
XX protein, useful for treating or preventing a disorder associated with
XX decreased or increased expression or activity of AMLPI.
XX
XX Example 2; SEQ ID NO 169; 172pp; English.
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```
XX
XX The present invention describes the human angiominotin-like protein 1
XX (AMLPI). human AMLPI has cytostatic activity, and can be used in gene
XX therapy. The AMLPI protein, nucleic acid molecules, antibodies, and
XX compositions of the present invention can be used for treating or
XX preventing a disorder associated with decreased or increased expression
XX or activity of AMLPI. The present sequence represents a scanning
XX oligonucleotide for human AMLPIa, which is used in an example from the
XX present invention.
XX
XX Sequence 17 BP; 7 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 177 CTGCTGCTGCTGCTGCT 193
Db 17 CTGCTGTTGCTGCTGCT 1

RESULT 2561
ADC37822/c
XX ADC37822 standard; DNA; 17 BP.
XX
XX ADC37822;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human AMLPIa scanning 17-mer oligonucleotide SEQ ID NO:171.
XX
XX human; angiominotin-like protein 1; AMLPI; cytostatic; gene therapy;
XX AMLPIa; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO2003037931-A2.
XX
XX 08-MAY-2003.
XX
XX 01-NOV-2002; 2002WO-US035129.
XX
XX 01-NOV-2001; 2001US-0334773P.
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
XX Shannon M, Phan T;
XX
XX WPI; 2003-430501/40.
XX
XX New isolated nucleic acid molecule encoding a human angiominotin-like
XX protein, useful for treating or preventing a disorder associated with
XX decreased or increased expression or activity of AMLPI.
XX
XX Example 2; SEQ ID NO 171; 172pp; English.
XX
XX The present invention describes the human angiominotin-like protein 1
XX (AMLPI). human AMLPI has cytostatic activity, and can be used in gene
XX therapy. The AMLPI protein, nucleic acid molecules, antibodies, and
XX compositions of the present invention can be used for treating or
XX preventing a disorder associated with decreased or increased expression
XX or activity of AMLPI. The present sequence represents a scanning
XX oligonucleotide for human AMLPIa, which is used in an example from the
XX present invention.
XX
XX Sequence 17 BP; 7 A; 6 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.4e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 178 TGCTGCTGCTGCTGCTG 194
```



Db 17 TGTGCTGTGCTGCTG 1

RESULT 2562

ADM54108/C

ID ADM54108 standard; mRNA; 17 BP.

AC ADM54108;

DT 03-JUN-2004 (first entry)

DE Human GRID mRNA substrate sequence #383.

XX Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
XX NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNazyme; amberzyme; Inozyme;  
XX hairpin ribozyme; tissue rejection; graft rejection; leukaemia.

OS Homo sapiens.

FN US2003134806-A1.

PD 17-JUL-2003.

PF 23-FEB-2001; 2001US-00792818.

PR 10-FEB-2000; 2000US-0181594P.

PA (JARV/) JARVIS T.

PA (CARL/) CARLOWITZ I V.

PA (MCSW/) MCSWIGEN J.

PA (HAMB/) HAMBLIN P A.

PA (ELLIS/) ELLIS J H.

PI Jarvis T, Carlowitz IV, Mcswigen J, Hamblin PA, Ellis JH;

DR WPI; 2003-829646/77.

XX New nucleic acid molecule that down-regulates expression of Grb2-related  
PT with insert domain (GRID) gene, useful for treating a condition  
PT associated with the level of GRID, e.g. tissue/graft rejection and  
PT leukemia.

XX Claim 4; SEQ ID NO 383; 74pp; English.

XX The invention relates to a nucleic acid molecule that down-regulates  
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a  
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNazyme,  
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell  
CC including the novel nucleic acid molecule, reducing GRID activity in a  
CC cell by contacting the cell with the novel nucleic acid molecule,  
CC treating a patient having a condition associated with the level of GRID  
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with  
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by  
CC contacting the cell with the novel nucleic acid molecule, an expression  
CC vector comprising a nucleic acid sequence (encoding at least the novel  
CC nucleic acid molecule in a manner that allows its expression), a  
CC mammalian cell including the expression vector and an enzymatic nucleic  
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid  
CC molecule is useful for treating a condition associated with the level of  
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is  
CC a target region for the enzymatic nucleic acids of the invention.

XX Sequence 17 BP; 4 A; 7 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.4e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 179 GCTGCTGTGCTGCTG 195

Db 17 GCTGCTGTGCTGCTG 1

RESULT 2563

ID AAQ26466 standard; DNA; 18 BP.

AC AAQ26466;

DT 25-MAR-2003 (revised)

DT 08-JAN-1993 (first entry)

DE Probe DB185.

XX PCR; polymerase chain reaction; amplify; class II HLA DOB1;  
XX insulin-dependent diabetes mellitus; IDDM; forensics; ss.

OS Synthetic.

FN M09211389-A1.

PD 09-JUL-1992.

PF 20-DEC-1991; 91MO-US009796.

PR 21-DEC-1990; 90US-00632180.

PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

PA Erlich HA, Bugawan T;

DR WPI; 1992-250108/30.

XX Novel method for typing HLA DOB1 alleles - for tissue typing, determining  
PT identity, and for studying disease susceptibility.

PS Disclosure; Page 30; 37pp; English.

XX The sequences given in AAQ26461-81 are probes which were used within the  
CC scope of the invention to type class II HLA DOB1 alleles. These probes  
CC were used to screen sequences amplified from the DOB1 gene second exon  
CC sequence. This method could be used to identify new DOB1 alleles. This  
CC method provides a simple, rapid and precise system for DOB1 typing,  
CC including those alleles which cannot be distinguished by serological  
CC methods. The presence or absence of a particular HLA DOB1 allele serves  
CC as an indicator of susceptibility to insulin-dependent diabetes mellitus  
CC (IDDM). Accurate DO typing is particularly important in the field of  
CC organ transplantation and in the study of the molecular basis of disease  
CC susceptibility. Moreover, samples from unusual sources, eg. ancient DNA  
CC or forensic samples, can be typed, even when the DNA sample is degraded  
CC (field.)

XX Sequence 18 BP; 0 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 159 CTGCTGCGCTGCTGCTG 175

Db 1 CTGCTGCGCTGCTGCTG 17

RESULT 2564

AAV20980

ID AAV20980 standard; DNA; 18 BP.

AC AAV20980;

DT 08-SEP-1998 (first entry)

DE Human PRC3-TFE3 construct DNA PCR primer #16.

XX PRC3; papillary renal cell carcinoma; TFE3; transcription factor;

KW fusion protein; translocation; diagnosis; treatment; PCR primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX  
 XX WO9806871-A1.  
 XX  
 PD 19-FEB-1998.  
 XX  
 XX 13-AUG-1997; 97WO-GB002209.  
 PF  
 XX 13-AUG-1996; 96GB-00016986.  
 PR  
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 PA  
 PI Cooper C, Clark J, Shipley J;  
 XX WPI; 1998-159557/14.  
 DR  
 XX  
 XX Diagnosing papillary renal cell carcinoma by detecting gene trans-  
 PT location - resulting in fusion of TFE3 gene with some other gene, also  
 PT related vectors, transformed cells, specific binding reagents, peptide(s)  
 PT encoded by fusions and therapeutic anti-sense sequences.  
 PS Disclosure; Page 34; 71pp; English.  
 XX  
 XX AAV20965-V20991 are PCR primers used in the construction of a novel  
 CC fusion protein constructed from a papillary renal cell carcinoma (PRCC)  
 CC associated protein and the transcription factor TFE3 which is used in a  
 CC method for the diagnosis, prophylactic and therapeutic treatment of  
 CC papillary renal cell carcinoma. The translocation t(X;1) (p11.2;q21.2)  
 CC found in PRCC results in a fusion of the TFE3 gene with a new chromosome  
 CC 1 gene designated PRCC (at 1q21.2), resulting in expression of a fusion  
 CC protein between the N-terminus of PRCC and almost the whole of the TFE3  
 CC gene. Normal TFE3 transcripts are no longer produced. Two other fusion  
 CC partners for TFE3 have also been detected; Nono, from a invx (p11.2; q13-  
 CC 24 or 12) translocation and the PSF splice factor gene, resulting in t(X;  
 CC 1) (p11.2;p34). These trans-locations define a subgroup of PRCC generally  
 CC encountered in patients younger than 25  
 CC  
 SQ Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 1.6e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1279 AGTGTGACAGCCTCAG 1295  
 Db 2 AGTGTGGCAGCCTCAG 18  
 RESULT 2565  
 AAA90055  
 ID AAA90055 standard; DNA; 18 BP.  
 XX  
 AC AAA90055;  
 XX  
 XX 21-DEC-2000 (first entry)  
 DT  
 XX  
 XX Bovine lysosomal traffic regulator gene (Lyst) PCR primer LYSTER.  
 DE  
 XX Bovine; cow; Chediak-Higashi syndrome; CH-S; Lyst; detection; PCR primer;  
 KW lysosomal traffic regulator; ss.  
 XX  
 OS Bos sp.  
 XX  
 XX JP2000189176-A.  
 PN  
 XX 11-JUL-2000.  
 PD  
 XX 25-DEC-1998; 99JP-00294619.  
 PF  
 XX 25-DEC-1998; 98JP-00368649.  
 PR

XX  
 PA (KAGO-) KAGOSHIMA KEN.  
 PA (CHIK-) CHIKUSAN GIUTSU KYOKAI SH.  
 XX  
 XX WPI; 2000-551638/51.  
 DR  
 XX  
 XX Gene diagnosis of bovine Chediak-Higashi syndrome.  
 PT  
 XX Example 1; Page 7; 21pp; Japanese.  
 PS  
 XX This invention relates to a reagent used in a method for the genetic  
 CC diagnosis of bovine Chediak-Higashi syndrome (CH-S). The reagent contains  
 CC a restriction enzyme Fok I or its isoschizomer and is used for the  
 CC detection of the presence or absence of a mutation site in the bovine  
 CC Lyst gene. The Lyst gene encodes a lysosomal traffic regulator protein.  
 CC The invention includes a kit for the detection of bovine CH-S and a  
 CC method for the genetic diagnosis of CH-S. The method is used for the  
 CC rapid detection of bovine CH-S and its carrier. The present sequence  
 CC represents a bovine Lyst gene PCR primer used in the method of the  
 CC invention  
 CC  
 SQ Sequence 18 BP; 2 A; 4 C; 6 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 1.6e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1343 CCTTGCATGAGTGG 1359  
 Db 1 CCTTGCATGAGTGG 17  
 RESULT 2566  
 AAZ74544/C  
 ID AAZ74544 standard; DNA; 18 BP.  
 XX  
 AC AAZ74544;  
 XX  
 XX 10-SEP-2001 (first entry)  
 DT  
 XX  
 XX Human biallelic marker downstream amplification primer SEQ ID NO:8900.  
 DE  
 XX Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO9954500-A2.  
 PN  
 XX 28-OCT-1999.  
 PD  
 XX 21-APR-1999; 99WO-IB000822.  
 PF  
 XX 21-APR-1998; 98US-0082614P.  
 PR 23-NOV-1998; 98US-0109732P.  
 XX  
 XX (GEST ) GENSET.  
 PA  
 PI Cohen D, Blumenfeld M, Chumakov I;  
 XX WPI; 2000-013267/01.  
 DR  
 XX Novel biallelic markers used to construct a high density disequilibrium  
 PT map of the human genome.  
 PT  
 XX Claim 8; Page 2128; 2745pp; English.  
 PS  
 XX AAZ65654 to AAZ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification

CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the  
 CC present invention

XX Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

3919 AGAACATGGGATGCCA 3935

17 AGAACATGGGATGCCA 1

RESULT 2567

AAA88315

AAA88315 standard; DNA; 18 BP.

AAA88315;

21-DEC-2000 (first entry)

Bovine lysosomal traffic regulator gene PCR primer SEQ ID NO:10.

Bovine Chediak-Higashi syndrome; CH-S; diagnosis; detection; Lyst;

lysosomal traffic regulator; PCR primer; se.

Bos taurus.

JP2000189165-A.

11-JUN-2000.

25-DEC-1998; 98JP-00368649.

25-DEC-1998; 98JP-00368649.

(KAGO-) KAGOSHIMA KEN.

(CHIK-) CHIKUSAN GIUTSU KYOKAI SH.

WPI; 2000-551636/51.

Genetic diagnosis of bovine Chediak-Higashi syndrome.

Example 1; Page 7; 23pp; Japanese.

The present invention describes a method for the genetic diagnosis of

bovine Chediak-Higashi syndrome (CH-S). The method comprises getting a

bovine nucleic acid sample, subjecting it to a gene amplifying reaction

and examining the mutation on the nucleic acid fragment. The method can

be used for an easy rapid detection of bovine CH-S and its carrier. The

present sequence represents a PCR primer for the bovine lysosomal traffic

regulator (Lyst) gene nucleotide sequence, which is related to CH-S

Sequence 18 BP; 2 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1343 CCTTCTGATGATGCTGG 1359

1 CCTTCTGATGATGCTGG 17

RESULT 2568

ADD28769

ADD28769 standard; DNA; 18 BP.

ADD28769;

15-JAN-2004 (first entry)

Escherichia coli O157:H7 VNTR amplicon sequence SEQ ID NO:386.

molecular sub-typing system; Escherichia coli;

variable number tandem repeat; VNTR; genetic data;

epidemiological database; research; gene; ds.

Escherichia coli.

MO2003050269-A2.

19-JUN-2003.

11-DEC-2002; 2002MO-US039914.

11-DEC-2001; 2001US-0339687P.

(UYAR-) UNIV ARIZONA.

(KEIM/) KEIM P.

(KEYS/) KEYS C.

Keim P, Keys C;

WPI; 2003-864934/80.

Molecular sub-typing system for Escherichia coli, comprises observing and

recording variable number tandem repeat arrays in an Escherichia coli DNA

sample.

Claim 7; SEQ ID NO 386; 16pp; English.

The present invention describes a molecular sub-typing system (S) for

Escherichia coli, which comprises observing and recording variable number

tandem repeats (VNTR) repeat arrays in an E. coli DNA sample. Also

described: (1) VNTR loci (I) for sub-typing E. coli O157:H7; (2) primers

(II) for amplifying (I); (3) amplicon comprising (II) and a locus

comprising a VNTR sequence from E. coli O157:H7; (4) multiplex cocktail

(III) for multiplex amplification of (I) comprising two or more primers

of (II); (5) kits for molecular sub-typing of E. coli O157:H7 by PCR

comprising primers for VNTR loci in E. coli, and amplifying reagents for

maintaining hybridisation and amplification condition in a PCR instrument

with DNA from an E. coli strain; (6) kits for molecular sub-typing of E.

coli O157:H7 strains by multiplex, comprising (III), and amplifying

reagents for maintaining hybridisation and amplification condition in a

multiplex instrument with DNA from an E. coli O157:H7 strain; and (7) sub

-typing (MI) an E. coli strain, comprising: (a) obtaining one or more

primers for amplifying loci comprising VNTR, where the primers have an

observable indicator; (b) obtaining single-stranded sample DNA from the

E. coli sample to be subtyped; (c) combining the primers, the sample DNA

and amplifying reagents under hybridising and amplifying conditions in a

PCR instrument to form amplicons comprising the primers and the VNTR; (d)

separating the amplicons by size; (e) evaluating numbers and sizes of

separated amplicons; and (f) comparing the evaluation to an evaluation of

amplicons obtained by PCR from a known E. coli strain. MI is useful for

producing discrete genetic data for an epidemiological database. (I) is

useful as a research tool. (S) is useful for subtyping pathogenic E.

coli. The present sequence represents an E. coli VNTR loci-related

amplicon sequence which is used in the exemplification of the present

invention.

Sequence 18 BP; 0 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

1343 CCTTCTGATGATGCTGG 1359

1 CCTTCTGATGATGCTGG 17

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 151 TGCTGCGCTGCTGCG 167  
 |||||  
 Db 1 TGCTGCGCTGCTGCG 17

RESULT 2569  
 ADD28811  
 ID ADD28811 standard; DNA; 18 BP.

XX ADD28811;  
 AC  
 XX  
 XX  
 DT 15-JAN-2004 (first entry)  
 XX  
 XX Escherichia coli 0157:H7 VNTR amplicon sequence SEQ ID NO:430.  
 DE  
 XX molecular sub-typing system; Escherichia coli;  
 KW variable number tandem repeat; VNTR; genetic data;  
 KM epidemiological database; research; gene; ds.  
 XX  
 XX Escherichia coli.  
 OS  
 XX WO2003050269-A2.  
 PN  
 XX 19-JUN-2003.  
 PD  
 XX 11-DEC-2002; 2002WO-US039914.  
 PF  
 XX 11-DEC-2001; 2001US-0339687P.  
 PR  
 XX (UYAR-) UNIV ARIZONA.  
 PA (KEIM/) KEIM P.  
 PA (KEYS/) KEYS C.  
 XX  
 XX Keim P, Keys C;  
 PI  
 XX WPI; 2003-864934/80.  
 DR  
 XX Molecular sub-typing system for Escherichia coli, comprises observing and  
 PT recording variable number tandem repeat arrays in an Escherichia coli DNA  
 sample.  
 PT  
 XX  
 PS Claim 7; SEQ ID NO 430; 166pp; English.

The present invention describes a molecular sub-typing system (S) for  
 CC Escherichia coli, which comprises observing and recording variable number  
 CC tandem repeats (VNTR) repeat arrays in an E. coli DNA sample. Also  
 CC described: (1) VNTR loci (I) for sub-typing E. coli 0157:H7; (2) primers  
 CC (II) for amplifying (I); (3) amplicon comprising (II) and a locus  
 CC comprising a VNTR sequence from E. coli 0157:H7; (4) multiplex cocktails  
 CC (III) for multiplex amplification of (I) comprising two or more primers  
 CC of (II); (5) kits for molecular sub-typing of E. coli 0157:H7 by PCR  
 CC comprising primers for VNTR loci in E. coli, and amplifying reagents for  
 CC maintaining hybridisation and amplification condition in a PCR instrument  
 CC with DNA from an E. coli strain; (6) kits for molecular sub-typing of E.  
 CC coli 0157:H7 strains by multiplex, comprising (III), and amplifying  
 CC reagents for maintaining hybridisation and amplification condition in a  
 CC multiplex instrument with DNA from an E. coli 0157:H7 strain; and (7) sub-  
 CC -typing (M1) an E. coli strain, comprising: (a) obtaining one or more  
 CC primers for amplifying loci comprising VNTR, where the primers have an  
 CC observable indicator; (b) obtaining single-stranded sample DNA from the  
 CC E. coli sample to be subtyped; (c) combining the primers, the sample DNA  
 CC and amplifying reagents under hybridising and amplifying conditions in a  
 CC PCR instrument to form amplicons comprising the primers and the VNTR; (d)  
 CC separating the amplicons by size; (e) evaluating numbers and sizes of  
 CC separated amplicons; and (f) comparing the evaluation to an evaluation of  
 CC amplicons obtained by PCR from a known E. coli strain. M1 is useful for  
 CC producing discrete genetic data for an epidemiological database. (I) is  
 CC useful as a research tool. (S) is useful for subtyping pathogenic E.  
 CC coli. The present sequence represents an E. coli VNTR loci related  
 CC amplicon sequence which is used in the exemplification of the present  
 CC invention.

XX SQ. Sequence 18, BP; 0 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 1.6e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 151 TGCTGCGCTGCTGCG 167  
 |||||  
 Db 1 TGCTGCGCTGCTGCG 17

RESULT 2570  
 ADD28768/c  
 ID ADD28768 standard; DNA; 18 BP.

XX ADD28768;  
 AC  
 XX  
 XX  
 DT 15-JAN-2004 (first entry)  
 XX  
 XX Escherichia coli 0157:H7 VNTR amplicon sequence SEQ ID NO:385.  
 DE  
 XX molecular sub-typing system; Escherichia coli;  
 KW variable number tandem repeat; VNTR; genetic data;  
 KM epidemiological database; research; gene; ds.  
 XX  
 XX Escherichia coli.  
 OS  
 XX WO2003050269-A2.  
 PN  
 XX 19-JUN-2003.  
 PD  
 XX 11-DEC-2002; 2002WO-US039914.  
 PF  
 XX 11-DEC-2001; 2001US-0339687P.  
 PR  
 XX (UYAR-) UNIV ARIZONA.  
 PA (KEIM/) KEIM P.  
 PA (KEYS/) KEYS C.  
 XX  
 XX Keim P, Keys C;  
 PI  
 XX WPI; 2003-864934/80.  
 DR  
 XX Molecular sub-typing system for Escherichia coli, comprises observing and  
 PT recording variable number tandem repeat arrays in an Escherichia coli DNA  
 sample.  
 PT  
 XX  
 PS Claim 7; SEQ ID NO 385; 166pp; English.

The present invention describes a molecular sub-typing system (S) for  
 CC Escherichia coli, which comprises observing and recording variable number  
 CC tandem repeats (VNTR) repeat arrays in an E. coli DNA sample. Also  
 CC described: (1) VNTR loci (I) for sub-typing E. coli 0157:H7; (2) primers  
 CC (II) for amplifying (I); (3) amplicon comprising (II) and a locus  
 CC comprising a VNTR sequence from E. coli 0157:H7; (4) multiplex cocktails  
 CC (III) for multiplex amplification of (I) comprising two or more primers  
 CC of (II); (5) kits for molecular sub-typing of E. coli 0157:H7 by PCR  
 CC comprising primers for VNTR loci in E. coli, and amplifying reagents for  
 CC maintaining hybridisation and amplification condition in a PCR instrument  
 CC with DNA from an E. coli strain; (6) kits for molecular sub-typing of E.  
 CC coli 0157:H7 strains by multiplex, comprising (III), and amplifying  
 CC reagents for maintaining hybridisation and amplification condition in a  
 CC multiplex instrument with DNA from an E. coli 0157:H7 strain; and (7) sub-  
 CC -typing (M1) an E. coli strain, comprising: (a) obtaining one or more  
 CC primers for amplifying loci comprising VNTR, where the primers have an  
 CC observable indicator; (b) obtaining single-stranded sample DNA from the  
 CC E. coli sample to be subtyped; (c) combining the primers, the sample DNA  
 CC and amplifying reagents under hybridising and amplifying conditions in a  
 CC PCR instrument to form amplicons comprising the primers and the VNTR; (d)  
 CC separating the amplicons by size; (e) evaluating numbers and sizes of  
 CC separated amplicons; and (f) comparing the evaluation to an evaluation of  
 CC amplicons obtained by PCR from a known E. coli strain. M1 is useful for

CC producing discrete genetic data for an epidemiological database. (1) is  
CC useful as a research tool. (S) is useful for subtyping pathogenic E.  
CC coli. The present sequence represents an E. coli VNR1 loci related  
CC amplicon sequence which is used in the exemplification of the present  
CC invention.

XX Sequence 18 BP; 4 A; 10 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGCG 167

Db 18 TGCTGGCGCTGCTGCG 2

RESULT 2571

ADSI6437

ID ADSI6437 standard; DNA; 18 BP.

AC ADSI6437;

XX 02-DEC-2004 (first entry)

DE Allele A oligo #2, used in polynucleotide sequence detection.

KW Single nucleotide polymorphism; SNP; genotyping; ss.

XX Synthetic.

XX US2004175704-A1.

PN 09-SEP-2004.

PF 12-MAY-2003; 2003US-00436231.

PR 06-MAR-2003; 2003US-0452481P.

XX (STRA-) STRATAGENE.

PI Sorge JA, Firmin A;

XX WPI; 2004-642120/62.

PT Determining polynucleotide sequence differences by amplifying  
PT polynucleotide in presence of labeled nucleotide and detecting variation  
PT based on incorporation frequency of labeled nucleotide compared to known  
PT reference frequency.

PS Disclosure; SEQ ID NO 2; 52pp; English.

CC The invention relates to compositions, kits and methods for detecting  
CC polynucleotide sequence differences. The method involves amplifying the  
CC polynucleotide of interest in the presence of a labelled nucleotide and  
CC detecting variation based on incorporation frequency of labelled  
CC nucleotide compared to known reference frequency. The method is useful  
CC for determining a sequence difference such as a single nucleotide  
CC polymorphism (SNP) or a tandem repeat, between a region of interest in a  
CC polynucleotide and a reference sequence. It is useful for determining the  
CC presence of a mutation in a region of interest in a polynucleotide and is  
CC also useful for genotyping. The present sequence is an allelic  
CC oligonucleotide used in polynucleotide sequence detection.

XX Sequence 18 BP; 0 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.6e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCT 193

Db 1 CTGCTGCTGCTGCTGCT 17

RESULT 2572

ADSI6436/c

ID ADSI6436 standard; DNA; 18 BP.

AC ADSI6436;

XX 02-DEC-2004 (first entry)

DE Allele A oligo #1, used in polynucleotide sequence detection.

KW Single nucleotide polymorphism ; SNP; genotyping; ss.

XX Unidentified.

XX US2004175704-A1.

PN 09-SEP-2004.

PF 12-MAY-2003; 2003US-00436231.

PR 06-MAR-2003; 2003US-0452481P.

XX (STRA-) STRATAGENE.

PI Sorge JA, Firmin A;

XX WPI; 2004-642120/62.

PT Determining polynucleotide sequence differences by amplifying  
PT polynucleotide in presence of labeled nucleotide and detecting variation  
PT based on incorporation frequency of labeled nucleotide compared to known  
PT reference frequency.

PS Disclosure; SEQ ID NO 1; 52pp; English.

CC The invention relates to compositions, kits and methods for detecting  
CC polynucleotide sequence differences. The method involves amplifying the  
CC polynucleotide of interest in the presence of a labelled nucleotide and  
CC detecting variation based on incorporation frequency of labelled  
CC nucleotide compared to known reference frequency. The method is useful  
CC for determining a sequence difference such as a single nucleotide  
CC polymorphism (SNP) or a tandem repeat, between a region of interest in a  
CC polynucleotide and a reference sequence. It is useful for determining the  
CC presence of a mutation in a region of interest in a polynucleotide and is  
CC also useful for genotyping. The present sequence is an allelic  
CC oligonucleotide used in polynucleotide sequence detection.

XX Sequence 18 BP; 8 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 18;  
Best Local Similarity 94.1%; Pred. No. 1.6e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCT 193

Db 18 CTGCTGCTGCTGCTGCT 2

RESULT 2573

AAN71284/c

ID AAN71284 standard; DNA; 19 BP.

XX AAN71284;

XX 06-JUN-1991 (first entry)

DE Sequence of probe GH61 based on an allele of the variable region of the  
DE HLA-DQ-beta second exon.

KW Sickle cell anaemia; haemoglobin C disease; HLA-DQ- alpha; HLA-DQ- beta;  
KW HLA-DR-beta; HLA-DP-alpha; HLA-DP-beta; hybridisation; screening; ss.

```

XX OS Homo sapiens.
XX PN EP237362-A.
XX PD 16-SEP-1987.
XX PF 13-MAR-1987; 87EP-00302196.
XX PR 13-MAR-1986; 86US-00839331.
XX PR 22-AUG-1986; 86US-00899344.
XX PA (CETU ) CETUS CORP.
XX PI Erlich HA, Saiki RK, Horn GT, Mullis KB;
XX WPI; 1987-258589/37.
XX DR
XX PT Detection of specific nucleotide variations in nucleic acids - by
XX PT hybridising with nucleotide triphosphate(s), and polymerisation agent,
XX PT seps. into single strands, amplifying, etc.
XX PS Example; Page 41; 70pp; English.
XX
XX The first base of the probe is labelled. The probe is used in a process
XX CC for detecting sequence variation directly. RS17, RS18 and RS21 are used
XX CC to distinguish normal alleles (N) from sickle cell alleles (S) from the
XX CC haemoglobin C disease alleles (C). GH66, GH67, GH68 and GH75 are in the
XX CC amplification and detection of HLA-DQ-alpha sequences. GH60, GH61, GH62,
XX CC GH69, GH70 and GH71 are used in the amplification and detection of HLA-DQ
XX CC -beta sequences. GH51, GH56, GH57, GH58 and GH59 are used in the
XX CC amplification and detection of HLA-DR-beta sequences. RS31, RS32 and RS33
XX CC are used in a process to amplify the genomic DNA from a known normal
XX CC individual, a known sickle cell individual, and an individual with no
XX CC beta-globin gene sequences (GM2064). XX1, XX2, XX3 and XX4 were used to
XX CC isolate human genomic DNA from clinical samples of various beta-
XX CC thalassemia genotypes. RS24 was used to isolate the normal beta-globin
XX CC allele (beta A)
XX
XX Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 159 CTGCTGGCGCTGCTGC 175
Db 19 CTGCTGGCGCTGCTGC 3
RESULT 2574
AAQ15050/c
ID AAQ150050 standard; DNA; 19 BP.
XX
XX AAQ150050;
AC
XX
XX 25-MAR-2003 (revised)
DT 01-NOV-1989 (first entry)
XX
XX Allele-specific probe (GH61) from DQ-beta-B region of DR3 haplotype.
DE
XX Probe; DNA; DQ-beta locus of HLA class II beta gene; allele-specific.
XX KM
XX Homo sapiens.
XX OS
XX PN MO8904875-A.
XX PD 01-JUN-1989.
XX PF 14-NOV-1989; 89WO-US004067.
XX PR 17-NOV-1987; 87US-00121519.
XX

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PA (CETU ) CETUS CORP.
XX
XX Erlich HA, Horn GT;
XX WPI; 1989-178393/24.
XX DR
XX Marker DNA sequences from HLA class-II beta region - detect amino acid 57
XX PT codon of dq-beta protein to detect auto-immune susceptibility.
XX PS Disclosure; Page 8; 72pp; English.
XX
XX Allele-specific probe (designated GH61), from the DQ-beta-B region of the
XX CC DR3 haplotype used to detect indirectly the identity of codon 57 in the
XX CC DQ-beta locus of the HLA Class II beta genes. Used to detect autoimmune
XX CC diseases, esp. diabetes mellitus, and Pemphigus vulgaris (see AAQ90051 -
XX CC AAQ90066). (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-
XX CC MAR-2003 to correct PI field.)
XX
XX Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.7e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 159 CTGCTGGCGCTGCTGC 175
Db 19 CTGCTGGCGCTGCTGC 3
RESULT 2575
AAQ15104/c
ID AAQ15104 standard; DNA; 19 BP.
XX
XX AAQ15104;
AC
XX 25-MAR-2003 (revised)
DT 26-FEB-1992 (first entry)
XX
XX Probe GH61 derived from HLA DQ-beta second exon.
DE
XX HLA-DQ beta; HLA typing; ss.
XX KM
XX Synthetic.
XX OS
XX EP459532-A.
XX PN
XX 04-DEC-1991.
XX PD
XX 13-MAR-1987; 91EP-00113105.
XX PF
XX 13-MAR-1986; 86US-00839331.
XX PR 22-AUG-1986; 86US-00899344.
XX
XX (CETU ) CETUS CORP.
XX PA (HOPF ) HOPFMANN-LA ROCHE AG F.
XX PI Erlich HA, Saiki RK, Horn GT, Mullis KB;
XX WPI; 1991-355814/49.
XX DR
XX Oligo-nucleotide primers for amplifying human leucocyte antigen genes -
XX PT for detection of gene variations and polymorphisms, utilising new probes.
XX PS Claim 14; Page 26; 27pp; English.
XX
XX Primers GH28 and GH29 (AAQ15095 and AAQ15096, respectively),
XX CC complementary to opposite strands of the conserved 5' and 3' ends of the
XX CC DQ beta second exon were used to amplify sample fragments. Some HLA-DQ
XX CC allele specific probes (including DH61) from two variable regions of the
XX CC DQ beta second exon were designed based on an analysis of HLA-DQ beta
XX CC sequences from diverse sources which were grouped into allelic variants.
XX CC The probes were found to have reasonable specificity for the portions of
XX CC the allele being detected in genomic DNA samples. See AAQ15093-Q15112.
XX

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```

CC (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC correct PA field.)
XX
SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 159 CTGCTGGCGCTGCTGC 175
Db 19 CTGCTGGCGCTGCTGC 3

RESULT 2576
AAQ15037/C
ID AAQ15037 standard; DNA; 19 BP.
XX
AC AAQ15037;
XX
XX 25-MAR-2003 (revised)
DT 25-FEB-1992 (first entry)
XX
DE HLA-DQbeta probe GH61.
XX
XX Insulin-dependent diabetes mellitus; probe; HLA; typing; diagnosis; ss.
XX
OS Synthetic.
XX
XX EP459533-A.
XX
XX 04-DEC-1991.
XX
XX 13-MAR-1987; 91EP-00113236.
XX
XX 13-MAR-1986; 86US-00839331.
XX
XX 22-AUG-1986; 86US-00899344.
XX
XX (CETU ) CETUS CORP.
XX
XX (HOFF ) HOFFMANN-LA ROCHE AG F.
XX
XX Erlich HA, Saiki RK, Horn GT, Mullis KB;
XX
XX WPI; 1991-355815/49.
XX
XX
XX Oligo-nucleotide probe gpe. hybridising to gene sequence variations -
XX allow sensitive detection of genetic polymorphisms and are used for
XX detecting insulin dependent diabetes.
XX
XX Claim 9(11); Page 31; 31pp; English.
XX
XX Based on the analysis of HLA-DQbeta sequences from diverse sources, which
XX were grouped into allelic variants, the probes (see AAQ15036-41) from two
XX variable regions of the DQbeta second exon encompassing each variant were
XX synthesized. See also AAQ15025-51 and AAQ15165-68. (Updated on 25-MAR-
XX 2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 19 BP; 4 A; 8 C; 7 G; 0 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 159 CTGCTGGCGCTGCTGC 175
Db 19 CTGCTGGCGCTGCTGC 3

RESULT 2577
AAQ101025
ID AAQ101025 standard; DNA; 19 BP.
XX
XX AAQ101025;
AC

```

```

XX
XX 26-APR-1999 (first entry)
DT
XX
XX SNRPN probe.
DE
XX
XX SNRPN; genomic imprinting; chromosome 15; 15q11-15q13; uniparental;
XX small nuclear ribonucleoprotein particle associated polypeptide Smn;
XX methylation-sensitive; restriction enzyme; DNA polymerase; disomy;
XX Prader-Willi syndrome; Angelman Syndrome; population screening; mutation;
XX radiation mutagen; probe; hybridisation; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9901580-A1.
XX
XX 14-JAN-1999.
XX
XX 02-JUL-1998; 98WO-US013818.
XX
XX 03-JUL-1997; 97US-00887569.
XX
XX (UYCA-) UNIV CASE WESTERN RESERVE.
XX
XX Nicholls RD, Saitoh S;
XX
XX WPI; 1999-106078/09.
XX
XX
XX Detection of genetic abnormalities associated with genomic imprinting
XX disorders - by using methylation-sensitive restriction enzymes.
XX
XX Example 2; Page 32; 54pp; English.
XX
XX The invention relates to a method of diagnosing genomic imprinting
XX disorders which involves (a) providing: (i) a biological sample possibly
XX containing genomically imprinted DNA; (ii) two or more nucleotide primers
XX (AAQ10102 and AAQ10103) which preferably flank the SNRPN (small nuclear
XX ribonucleoprotein particle associated polypeptide Smn) gene and are
XX complementary to a portion of human chromosome 15 (the sequence between
XX 15q11-15q13; (iii) at least one methylation-sensitive restriction enzyme,
XX preferably selected from NotI and HhaI; and (iv) a thermostable DNA
XX polymerase; (b) isolating the DNA from the biological sample; (c)
XX digesting the DNA with the restriction enzyme to create a restriction
XX product; (d) exposing the primers to the restriction product; and (e)
XX amplification, preferably by using the polymerase chain reaction (PCR).
XX The invention provides compositions and methods for the rapid detection
XX of DNA deletions, uniparental disomy and genomic imprinting mutations
XX associated with Prader-Willi syndrome (PWS), Angelman Syndrome (AS) and
XX other genomic imprinting disorders. (see AAQ101021 for detailed
XX applications). Sequences AAQ101022-25 represent SNRPN probes used in RNA
XX analyses for confirming the diagnoses
XX
SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2320 CTAAGGCTTAGGAC 2336
Db 1 CTAAGGCTTAGGAC 17

RESULT 2578
AAZ29215/C
ID AAZ29215 standard; DNA; 19 BP.
XX
XX AAZ29215;
AC
XX
XX 21-FEB-2000 (first entry)
DT
XX
XX Primer IFN6 used for amplification of human IFNA2 genomic DNA.
DE
XX

```

KW Interferon alpha 2; IFNA2; genomic sequence; transcription start site;  
 KW upstream; targeting sequence; regulatory sequence; marker gene; PCR;  
 KW homologous recombination; recombinant cell; gene therapy; DNA construct;  
 KW Papilloma virus; Hepatitis B virus; Hepatitis C virus; Vaccinia virus;  
 KW Herpes simplex virus; Herpes zoster varicellous virus; Rhinovirus;  
 KW Primer IFN6; human leukocyte genomic library lambda; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9957292-A1.  
 XX  
 PD 11-NOV-1999.  
 XX  
 PF 05-MAY-1999; 99WO-US009925.  
 XX  
 PR 07-MAY-1998; 98US-0084648P.  
 PR 21-MAY-1998; 98US-0086555P.  
 XX  
 PA (TRAN-) TRANSKARYOTIC THERAPIES INC.  
 XX  
 PI Treco DA, Heartlein MW, Selden RF;  
 XX  
 DR WPI; 2000-072236/06.  
 XX  
 PT Novel genomic sequences used to treat human diseases and disorders.  
 PS Disclosure; Page 12; 68pp; English.  
 XX  
 XX The present DNA sequence is the primer IFN6, that is used to amplify the  
 CC human genomic sequence of interferon alpha 2 (IFNA2). This primer is used  
 CC to generate an oligonucleotide probe, to screen the human leukocyte  
 CC genomic library lambda, to obtain the genomic DNA upstream of the coding  
 CC region of the IFNA2 gene. The 5' end of the primer corresponds to position  
 CC +69 of IFNA2  
 CC  
 SQ Sequence 19 BP; 5 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
 XX  
 XX  
 Query Match 0.1%; Score 15.4; DB 1; Length 19;  
 Best Local Similarity 94.1%; Pred. No. 1.7e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2925 GTCAAGCTGCTCACTGG 2941  
 Db 19 GTCAAGCTGCTCTGTGG 3  
 XX  
 RESULT 2579  
 AAC73282/c  
 ID AAC73282 standard; DNA; 19 BP.  
 XX  
 AC AAC73282;  
 XX  
 DT 02-FEB-2001 (first entry)  
 XX  
 DE Reverse primer #53 used in multiplexing PCR/SBE assay.  
 XX  
 KW Oligonucleotide array; genotyping; single base extension reaction; SBE;  
 KW PCR primer; polymorphic locus; single nucleotide polymorphism; ss.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200058516-A2.  
 XX  
 PD 05-OCT-2000.  
 XX  
 PF 27-MAR-2000; 2000WO-US008069.  
 XX  
 PR 26-MAR-1999; 99US-0126473P.  
 PR 23-JUN-1999; 99US-0140359P.  
 XX  
 PA (WHEED ) WHITEHEAD INST BIOMEDICAL RES.  
 PA (AFVY-) AFVYMETRIX INC.

XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;  
 PI Ryder T, Sklar P;  
 XX  
 DR WPI; 2000-656171/63.  
 XX  
 PT Universal array of oligonucleotides tags attached to a solid substrate  
 PT along with locus-specific tagged oligonucleotides useful in genotyping  
 PT using single base extension reactions.  
 XX  
 PS Example 7; Page 53; 70pp; English.  
 XX  
 CC The present invention relates to an oligonucleotide array comprising  
 CC oligonucleotide tags fixed to a solid substrate. The oligonucleotide  
 CC array is useful for genotyping a nucleic acid sample at one or more loci  
 CC via single base extension (SBE) reactions. A pair of primers is used to  
 CC amplify a polymorphic locus in a sample e.g. a single nucleotide  
 CC polymorphism (SNP). The present sequence is one of the primers used in  
 CC the method of the present invention to amplify a polymorphic sample. The  
 CC amplified nucleic acid product is then used as a template in a SBE  
 CC reaction with an extension primer. The SBE reaction products are used to  
 CC form the oligonucleotide array  
 CC  
 SQ Sequence 19 BP; 3 A; 6 C; 4 G; 6 T; 0 U; 0 Other;  
 XX  
 XX  
 Query Match 0.1%; Score 15.4; DB 1; Length 19;  
 Best Local Similarity 94.1%; Pred. No. 1.7e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2935 TCAGTGAGGCAACACA 2951  
 Db 17 TCAGTGAGGCAACACA 1  
 XX  
 RESULT 2580  
 AAQ51566  
 ID AAQ51566 standard; DNA; 20 BP.  
 XX  
 AC AAQ51566;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 19-MAY-1994 (first entry)  
 XX  
 DE PCR primer used to amplify fragment of CFTR gene.  
 XX  
 KW Targeting; recombination; gene therapy; transgenic animals; mutation;  
 KW cystic fibrosis transmembrane conductance regulator; CFTR; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9322443-A1.  
 XX  
 PD 11-NOV-1993.  
 XX  
 PF 23-APR-1993; 93WO-US003868.  
 XX  
 PR 24-APR-1992; 92US-00873438.  
 PR 02-SEP-1992; 92US-00939767.  
 XX  
 PA (STRI ) SRI INT.  
 XX  
 PI Zarling DA, Sena EP;  
 XX  
 DR WPI; 1993-368802/46.  
 XX  
 PT In vivo homologous sequence targeting in eukaryotic cells - using a  
 PT targeting polynucleotide and recombinase to deliver agents or alter  
 PT genes.  
 XX  
 PS Example 3; Page 61; 100pp; English.  
 XX  
 CC Two primers (AAQ51566, AAQ51567) were used to amplify a 491 base pair  
 CC fragment of the cystic fibrosis transmembrane conductance regulator



CC (CFTR) gene. This fragment was then used as a targeting polynucleotide  
 CC for the correction of a human CFTR disease allele (delta F508 mutation).  
 CC The targeting method can also be used to target chemical substrates, e.g.  
 CC drugs, in a sequence specific manner in-vivo, to correct or generate  
 CC genetic mutations in endogenous DNA sequences by homologous recombination  
 CC and/or gene conversion, or to produce homologously targeted transgenic  
 CC animals at high efficiency. (Updated on 25-MAR-2003 to correct PN field.)  
 XX

SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCCTGAACAG 3786  
 |||||  
 DB 2 CAGAGTACCTGAACAG 18

RESULT 2581  
 AA058587  
 ID AA058587 standard; DNA; 20 BP.

XX AA058587;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 02-AUG-1994 (first entry)

DE Human CFTR gene primer CF-1.

XX CFTR; cystic fibrosis transmembrane conductive regulator; PCR;  
 KW polymerase chain reaction; amplification; primer; hybridization; probe;  
 KW gene therapy; homologous recombination; ss.

OS Synthetic.

PN MO9404032-A1.

PD 03-MAR-1994.

PF 20-AUG-1993; 93WO-US007917.

PR 21-AUG-1992; 92US-00933471.

PA (REGC ) UNIV CALIFORNIA.

PI Gruenert DC, Kunzelmann K;

DR WPI; 1994-082716/10.

XX Compn. for altering DNA sequences by homologous recombination - to  
 PT correct genetic defects in mammals, partic. cystic fibrosis.

XX Disclosure; Page 66; 101pp; English.

XX The primers given in AA058587-94 and AA058597-98 were derived from the  
 CC human CFTR gene and used for PCR amplification of wild-type and mutant  
 CC CFTR DNA. Identification of the CFTR delta-F508 deletion in genomic DNA  
 CC was performed using a probe (AA058595) for normal CFTR DNA and a probe  
 CC (AA058596) for the delta-F508 deletion. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 XX

SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCCTGAACAG 3786  
 |||||  
 DB 2 CAGAGTACCTGAACAG 18

RESULT 2582

AA074485  
 ID AA074485 standard; DNA; 20 BP.

XX AA074485;  
 XX

DT 11-DEC-1997 (first entry)

DE Allele-mutation detection allele-specific PCR primer CF 1.

XX Differentiation; gene expression; gene therapy; genetic disorder;  
 KW cystic fibrosis; Fanconi's anaemia; sickle cell anaemia;  
 KW retinitis pigmentosa; xeroderma pigmentosa; ataxia telangiectasia;  
 KW Bloom's syndrome; retinoblastoma; Duchenne's muscular dystrophy;  
 KW Tay-Sachs's disease; polymerase chain reaction; ss.

OS Synthetic.

PN MO9713869-A1.

PD 17-APR-1997.

PF 08-OCT-1996; 96WO-US016162.

PR 10-OCT-1995; 95US-0005254P.

PA (REGC ) UNIV CALIFORNIA.

PI Gruenert DC, Dohrman A;

DR WPI; 1997-235905/21.

XX Detection of allele specific mutation(s) and differentiation in gene  
 PT expression - for assessment of gene therapy used in correction of genetic  
 PT disorders e.g. cystic fibrosis.

PS Claim 9; Page 23; 79pp; English.

XX A novel method has been developed for the detection of allele specific  
 CC mutations and for differentiation between gene expression of a mutated  
 CC tissue or cells and a normal non-mutated tissue. The method involves: (a)  
 CC obtaining a sample from the same type of each of the mutated and non-  
 CC mutated tissue or cells; (b) fixing the cells; (c) digesting the cells to  
 CC expose single stranded mRNA and to eliminate DNA contained in the cells;  
 CC (d) subjecting the mRNA to reverse transcription reaction conditions to  
 CC obtain first strand cDNA from the mRNA template; and (e) subjecting the  
 CC cDNA to polymerase chain reaction (PCR) to obtain the cDNA in sufficient  
 CC quantities for assay, where the amplification is performed in the  
 CC presence of allele-specific and allele-non-specific primers, using a  
 CC solution comprising at least one non-interfering labelled nucleotide  
 CC marker detectable by spectroscopic, autoradiographic, immunocytochemical  
 CC or enzymatic detection means. The present sequence represents a  
 CC specifically claimed allele-specific primer. The method may be used for  
 CC detection of a mutation which causes cystic fibrosis, Fanconi's anaemia,  
 CC sickle cell anaemia, retinitis pigmentosa, xeroderma pigmentosa, ataxia  
 CC telangiectasia, Bloom's syndrome, retinoblastoma, Duchenne's muscular  
 CC dystrophy or Tay-Sachs's disease. It may also be useful for qualitative  
 CC and quantitative assessment of the success of a gene therapy of these  
 CC diseases  
 XX

SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCCTGAACAG 3786  
 |||||  
 DB 2 CAGAGTACCTGAACAG 18

RESULT 2583  
 AA041652

```

ID  AAV41652 standard; DNA; 20 BP.
XX
AC  AAV41652;
XX
XX  12-OCT-1998 (first entry)
XX
DE  Nucleotide sequence of PCR primer 2.
XX
XX  PCR; primer: amplification; genetic disorder; mutant; wild-type;
XX  recirculating allele-specific primer extension; RASPE; sickle-cell;
XX  beta-thalassemia; anaemia; cystic fibrosis; CF; haemophilia; probe;
XX  familial hypercholesterolaemia; forensic analysis; thermo-regulation;
XX  hybridisation; ss.
XX
OS  Synthetic.
XX
XX  WO9828438-A1.
XX
PD  02-JUL-1998.
XX
PF  22-DEC-1997; 97WO-AU000875.
XX
PR  20-DEC-1996; 96AU-00004279.
XX
PA  (DIAT-) DIATECH PTY LTD.
XX
PI  Barnard RT, Dale JL, Walsh TP, Giffard P;
XX
DR  WPI; 1998-377667/32.
XX
XX  Determining target nucleotide(s) in nucleic acid - by binding to
XX  immobilised primer, cyclic primer extension, with incorporation of
XX  labelled nucleotide, only if primer and target sequence match exactly,
XX  used to diagnose genetic disorders.
XX
XX  Example 1; Page 34; 67pp; English.
XX
XX  This is the nucleotide sequence of the PCR primer used for amplification
XX  in the method of the invention which involves the diagnosis of genetic CC
XX  disorders. The method, designated RASPE, recirculating allele-specific
XX  primer extension) is used to determine different alleles of a structural
XX  gene, particularly mutant and wild-type alleles, and to detect different
XX  genetic loci associated with inherited or acquired genetic disorders,
XX  e.g. for diagnosis of beta-thalassemia, sickle-cell anaemia, cystic
XX  fibrosis (CF), haemophilia and familial hypercholesterolaemia, but also
XX  for forensic analysis, geno-typing and DNA tissue typing. The method of
XX  amplification and/or detection of target can be used for RASPE or more
XX  generally for any process requiring thermo-regulation of a reaction and
XX  recycle of denatured probe and target DNA, e.g. solid-state polymerase
XX  chain reaction, Southern or Northern blotting.
XX
SQ  Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCTGAAACAG 3786
    ||||| ||||| |||||
Db 2 CAGAGTACTGTGAAACAG 18

RESULT 2584
AAZ39155
ID  AAZ39155 standard; cDNA to tRNA; 20 BP.
XX
XX  AAZ39155;
XX
XX  02-MAR-2000 (first entry)
XX
DE  Human cystic fibrosis transmembrane regulator PCR primer CFI.
XX
XX  Human; cystic fibrosis transmembrane regulator; CFTR; PCR primer;

```

```

XX  transgenic mammal; veterinary disease; ion-channel; GPCR; enzyme;
XX  G-protein coupled receptor; immunoglobulin; growth factor; milk protein;
XX  ss.
XX
OS  Synthetic.
XX
XX  Homo sapiens.
XX
PN  WO960108-A2.
XX
XX  25-NOV-1999.
XX
XX  14-MAY-1999; 99WO-US010731.
XX
PR  15-MAY-1998; 98US-00079877.
XX
PA  (STRI ) SRI INT.
XX
XX  Pati S, Zarling D;
XX
DR  WPI; 2000-062454/05.
XX
XX  New transgenic mammals useful as models of human and veterinary disease.
XX
XX  Example 3; Page 61; 82pp; English.
XX
XX  The present invention describes a non-human mammal comprising a modified
XX  endogenous gene (G) which is selected from a group consisting of a gene
XX  or sequence encoding an ion-channel, a G-protein coupled receptor (GPCR),
XX  an immunoglobulin, a growth factor, an enzyme or a milk protein. Modified
XX  (G) is useful in producing transgenic mammals, which include farm animal,
XX  such as cattle, sheep, pigs, horses, goats, mice, rats, rabbits, guinea
XX  pigs, hamsters and gerbils; and primates. Transgenic mammals are useful
XX  as models of human and veterinary diseases. Modified (G) is useful in
XX  correcting mutations at known sites, replace genes or gene segments for
XX  defective ones, or introduce foreign genes into cells. The present
XX  sequence represents a PCR primer for human cystic fibrosis transmembrane
XX  regulator (CFTR), which is used in an example from the present invention
XX

SQ  Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCTGAAACAG 3786
    ||||| ||||| |||||
Db 2 CAGAGTACTGTGAAACAG 18

RESULT 2585
AAZ35086/c
ID  AAZ35086 standard; DNA; 20 BP.
XX
XX  AAZ35086;
XX
XX  13-MAR-2000 (first entry)
XX
XX  Herpesvirus entry protein B (HvEB) PCR primer PPR2A8.
XX
XX  Herpesvirus entry protein B; HvEB; tumour necrosis factor receptor;
XX  alphaherpesvirus; infection; therapy; human; PCR; primer; ss.
XX
OS  Synthetic.
XX
XX  Homo sapiens.
XX
PN  WO9963063-A1.
XX
XX  09-DEC-1999.
XX
XX  02-JUN-1999; 99WO-US012235.
XX
XX  03-JUN-1998; 98US-0087862P.
XX

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PA (NOUN ) UNIV NORTHWESTERN.
PA (UNPE-) UNIV PENNSYLVANIA.
XX
XX Spear PG, Warner MS, Geraghty RG, Martinez WM, Montgomery RL;
PI Cohen GH, Eisenberg RJ, Whitbeck CJ, Krummenacher C;
XX
XX WPI, 2000-097325/08.
XX
XX Novel proteins used to prevent viral infection and to identify other
XX inhibitors.
XX
XX Example 1; Page 57; 144pp; English.
XX
XX Primer PR2A8 was used in the PCR amplification of herpesvirus entry
XX protein B (HvEB) cDNA (see also AA235084). HvEB is a novel member of the
XX human tumor necrosis factor receptor family that mediates entry of an
XX alphaherpesvirus (aHV) into cells. Cellular herpesvirus entry proteins
XX (I) such as HvEB, their mutants, homologues, derivatives, variants and
XX active fragments are claimed, as are recombinant cells (especially CHO,
XX murine melanoma, swine testes), vectors, and anti-cellular herpesvirus
XX protein compounds (II). Suitable (II) include antisense oligonucleotides,
XX antibodies specific for (I), peptides and peptidomimetics. Methods of
XX identifying (II), of inhibiting entry of an aHV into a cell using (II),
XX and of treating an aHV infection in an animal, especially a human, using
XX (II) are also claimed
XX
XX Sequence 20 BP; 8 A; 6 C; 6 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 177 CTGCTGCTGCTGCTGCT 193
Db 20 CTGCTGCTGCTGCTGCT 4
RESULT 2586
AAH86902
ID AAH86902 standard; DNA; 20 BP.
XX
XX AAH86902;
XX
XX 15-JAN-2001 (first entry)
XX
XX Probe for human cystic fibrosis gene.
XX
XX Detection; nucleic acid hybrid; depolymerisation; analysis; SNP;
XX single nucleotide polymorphism; identification; viral load; probe;
XX genotyping; medical marker diagnostic; primer; target; mutation;
XX genetic disease; ss.
XX
XX Homo sapiens.
XX
XX WO200049180-A1.
XX
XX 24-AUG-2000.
XX
XX 18-FEB-2000; 2000WO-US004242.
XX
XX 18-FEB-1999; 99US-00252436.
XX
XX 21-JUL-1999; 99US-00358972.
XX
XX 25-AUG-1999; 99US-00383316.
XX
XX (PROM-) PROMEGA CORP.
XX
XX Shultz JW, Lewis MK, Leippe D, Mandrekar M, Kephart D, Rhodes RB;
XX Andrews CA, Hartnett JR, Gu T, Olson RJ, Wood KV, Welch R;
XX
XX WPI; 2000-565377/52.
XX
XX Determining presence or absence of a predetermined endogenous nucleic
XX acid sequence by using an enzyme that depolymerizes the 3' end of an

```

```

PT oligonucleotide probe hybridized to a target sequence to release
PT identifier nucleotides.
XX
XX Example; Page 324; 389pp; English.
XX
XX The present invention describes a method (M1) for determining the
XX presence or absence of a predetermined endogenous nucleic acid target
XX sequence (ENAT). The method comprises hybridising a probe having an
XX identifier nucleotide (IN) with ENAT which is treated with an enzyme that
XX depolymerises the 3' end of hybridised NA to release the INs. M1 is used
XX for determining the number of known sequence repeats present in a nucleic
XX acid target sequence in a nucleic acid sample. The method is also useful
XX for determining whether a nucleic acid target sequence in a sample is an
XX allele from a homozygous or heterozygous locus. The method is also useful
XX for detection of mutations, translocations and SNPs in nucleic acids
XX (including those associated with genetic disease), determination of viral
XX load, species identification, sample contamination, and analysis of
XX forensic samples. AAH86791 to AAH87079 and AAH12817 represent sequence
XX which are used in the exemplification of the present invention. N.B.
XX There is a discrepancy between the SEQ ID NO: and sequences given in the
XX examples, and the SEQ ID NO: and sequences given in the sequence listing
XX from the present invention
XX
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3770 CAGAGTCCTCGAAGACAG 3786
Db 2 CAGAGTACTCTGAAGACAG 18
RESULT 2587
AAH28166
ID AAH28166 standard; DNA; 20 BP.
XX
XX AAH28166;
XX
XX 05-SEP-2001 (first entry)
XX
XX PCR primer used to amplify a fragment of human SMAF-2 gene.
XX
XX Th1; Th2; Th3; cytokine; suppressive macrophage activation factor;
XX SMAF-1; SMAF-2; inflammation; infection; allergy; autoimmune disease;
XX transplant rejection; graft-versus host disease; malignancy;
XX mucosal immunity; trypanosomiasis; inflammatory bowel disease;
XX leishmaniasis; malaria; schistosomiasis; HIV-associated disease; measles;
XX influenza; tuberculosis; lepra; psoriasis; multiple sclerosis;
XX rheumatoid arthritis; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200139786-A2.
XX
XX 07-JUN-2001.
XX
XX 20-NOV-2000; 2000WO-EP011527.
XX
XX 30-NOV-1999; 99EP-00870245.
XX
XX (INNO-) INNOGENETICS NV.
XX
XX Fransen L, De Baetselier P;
XX
XX WPI; 2001-417788/44.
XX
XX New suppressive macrophage activation factor proteins, SMAF-1 or SMAF-2
XX useful for the manufacture of medicament for treating type 1, type 2 or
XX type 3 responses.
XX
XX Example 4; Page 41; 103pp; English.

```

XX PCR primers AAH28165-67 were used to amplify fragments of a gene encoding  
 CC a human suppressive macrophage activation factor (SMAF)-2. SMAF-1 and  
 CC SMAF-2 modulate the production of Th1, Th2 and Th3 cytokines. The  
 CC specification describes the use of SMAF-1 and SMAF-2 for the manufacture  
 CC of a medicament for the treatment of diseases mediated by type 1, type 2  
 CC or type 3 responses, such as inflammation, infections, allergies,  
 CC autoimmune diseases, transplant rejection, graft-versus host disease,  
 CC malignancies and diseases involving mucosal immunity. They are used  
 CC especially for the treatment of inflammatory bowel disease.  
 CC leishmaniasis, trypanosomiasis, malaria, echinococcosis, HIV-associated  
 CC diseases, measles, influenza, tuberculosis, lepra, and infections by  
 CC Candida, Borrelia, Listeria, Bordetella or Chlamydia, psoriasis, multiple  
 CC sclerosis, and rheumatoid arthritis  
 CC  
 SQ Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1073 CACATCACCCTCCAAAGC 1089  
 Db 4 CCATCACCCTCCAAAGC 20  
 RESULT 2588  
 ABQ92940/c  
 ID ABQ92940 standard; DNA; 20 BP.  
 XX  
 AC ABQ92940;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 21-OCT-2002 (first entry)  
 XX  
 DE T. tauschii/wheat D genome microsatellite cfd33 left PCR primer.  
 XX  
 XX Microsatellite marker; wheat; D genome; mapping; genotyping;  
 KM polymorphism; phenotypic trait; QTL; quantitative trait locus;  
 KM disease-associated gene; development factor; quality factor;  
 KM resistance factor; wheat product; identification; detection;  
 KM genetically modified wheat; PCR; primer; ss.  
 XX  
 OS Aegilops tauschii.  
 OS Triticum aestivum.  
 PN EP1217079-A1.  
 PD 26-JUN-2002.  
 XX  
 PF 22-DEC-2000; 2000EP-00403659.  
 XX  
 PR 22-DEC-2000; 2000EP-00403659.  
 XX  
 PA (INRG ) INRA INST NAT RECH AGRONOMIQUE.  
 XX  
 PI Bernard M, Sourdille P, Guyomarch H;  
 XX  
 DR WPI; 2002-550410/59.  
 XX  
 XX Map of wheat D genome comprising the genome location of a microsatellite  
 PT marker, useful for e.g. identifying genes responsible for a desired  
 PT phenotypic trait, especially quantitative trait loci in wheat, and  
 PT diseases.  
 XX  
 PS Claim 4; Page 4; 105pp; English.  
 XX  
 CC The invention relates to a map of the bread wheat D genome comprising the  
 CC genome location of a microsatellite marker selected from a group of 185  
 CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use  
 CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to  
 CC amplify and detect the microsatellite markers, and to identify genes  
 CC responsible for a phenotypic trait of interest in wheat. Wheat is an

CC allohexaploid species consisting of 3 diploid genomes designated A, B and  
 CC D, resulting from two successive intercrossings involving at least three  
 CC different species. The D genome is thought to have been introduced in the  
 CC most recent intercrossing, between the amphiploid AABB and Triticum  
 CC tauschii (DD), probably involving only a limited number of genotypes of  
 CC both species. Due to its polyploid genome, the large size of its genome,  
 CC and its low level of polymorphism, the genetic mapping of wheat has to  
 CC date been difficult. Microsatellites are tandemly repeated sequences  
 CC between one and six nucleotides long, and are very polymorphic in length,  
 CC mainly due to polymerase slippage during replication. This high degree of  
 CC polymorphism makes them especially suitable for the genetic mapping of  
 CC species which show little intraspecies polymorphism, such as wheat. In  
 CC addition, microsatellites are codominant, and exhibit Mendelian  
 CC inheritance. The 185 microsatellite markers of the invention are  
 CC developed from the ancestral diploid donor species Triticum tauschii and  
 CC map to the wheat D genome, which is less polymorphic than the A or B  
 CC genomes. These microsatellite markers thus help to overcome some of the  
 CC problems associated with the genetic mapping of wheat. The wheat D genome  
 CC map and the microsatellite markers and associated primers of the  
 CC invention are useful for identifying genes responsible for a phenotypic  
 CC trait of interest, most notably QTLs (quantitative trait loci). In  
 CC particular they may be used for analysing genes and alleles implicated in  
 CC disease and for identifying development factors, quality factors and  
 CC factors conferring resistance to pathogens and xenobiotics. The  
 CC microsatellite markers, and associated primers may be also be used in  
 CC mapping and genotyping diploid and polyploid species of Triticum,  
 CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum  
 CC aestivum, or related species; for identifying cultivars and hybrids of  
 CC Triticum and related species; to assess whether or not a product  
 CC comprises wheat or a related species; and to assess whether or not a  
 CC product comprises genetically modified wheat. The present sequence  
 CC represents a specifically claimed Triticum tauschii/wheat genome D  
 CC microsatellite marker left PCR primer of the invention. (Updated on 29-  
 CC AUG-2003 to standardise OS field)  
 XX  
 SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 177 CTGCTGCTGCTGCTGCT 193  
 Db 18 CTGCTGCTGCTGCTGCT 2  
 RESULT 2589  
 AAD37210/c  
 ID AAD37210 standard; DNA; 20 BP.  
 XX  
 AC AAD37210;  
 XX  
 DT 21-AUG-2002 (first entry)  
 DT  
 XX  
 DE Human MEKK4 antisense oligonucleotide, ISIS #123145.  
 XX  
 KM Human; MEKK4 modulation; mitogen-activated protein kinase kinase 4; MTK1;  
 KM MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cyclostatic;  
 KM prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;  
 KM antisense; inflammatory; phosphorothioate backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 PN  
 PD  
 XX  
 FH Key Location/Qualifiers  
 FT 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone"  
 FT modified\_base 1..5  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethyl nucleotides"





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XX AC AC46907;
XX XX
XX 05-JUN-2003 (first entry)
XX XX
XX Human phospholipase A2 group IIA forward PCR primer SEQ ID NO:4.
DE XX
XX Phospholipase A2 group IIA; synovial; antisense modulation; inflammation;
XX phospholipase A2 group IIA inhibitor; phosphorothioate; anti-inflammatory;
XX antidiabetic; cytostatic; antipsoriatic; vaccine; gene therapy; cancer;
XX psoriasis; diabetes; PCR primer; ss.
OS Homo sapiens.
OS Synthetic.
XX WO200297133-A1.
XX PD
XX 05-DEC-2002.
XX PF
XX 21-MAY-2002; 2002WO-US016135.
XX PR
XX 25-MAY-2001; 2001US-00865866.
XX PA
XX (ISIS-) ISIS PHARM INC.
XX PI
XX Bennett CF, Wyatt JR;
XX DR
XX WPI; 2003-140495/13.
XX PT
XX New compound that hybridizes with and inhibits the expression of
XX PT Phospholipase A2, group IIA, useful for preparing a composition of
XX PT treating or preventing inflammation, cancer, psoriasis or diabetes.
XX PS
XX Example 13; Page 83; 135pp; English.
XX CC
XX The present invention describes a compound (I) comprising 8-50
XX CC nucleobases which is targeted to a 5' untranslated region (UTR), coding,
XX CC 3' UTR or intron region of a nucleic acid molecule encoding phospholipase
XX CC A2, group IIA (synovial), where the compound specifically hybridizes with
XX CC and inhibits the expression of phospholipase A2, group IIA (synovial).
XX CC Also described: (1) a composition comprising the compound and a carrier
XX CC or diluent; (2) a method of inhibiting the expression of phospholipase
XX CC A2, group IIA in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with phospholipase A2, group IIA
XX CC (synovial). (I) has antiinflammatory, antidiabetic, cytostatic and
XX CC antipsoriatic activities, and can be used in vaccines and in gene
XX CC therapy. The compound (I) can be used for preparing a composition for
XX CC treating or preventing inflammation, cancer, psoriasis or diabetes. The
XX CC present sequence represents a PCR primer for human phospholipase A2 group
XX CC IIA (synovial), which is used in an example from the present invention
SQ
SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4980 TCACCAATTCCCATGG 4996
DB 18 TCACCAATTCCCATGG 2
RESULT 2594
ADP91112
ID ADP91112 standard; DNA; 20 BP.
XX
XX ADF91112;
XX
XX 26-FEB-2004 (first entry)
DE Microorganism detection PCR primer, SEQ ID 195.
XX
XX Detection; microorganism; PCR; primer; bacterium; fungus; protozoan;
KW

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KW virus; diarrhoea; food poisoning; ss.
XX
XX Salmomella typhi.
OS
XX JP2003164282-A.
XX
XX 10-JUN-2003.
XX PD
XX 29-NOV-2001; 2001JP-00365153.
XX PF
XX 29-NOV-2001; 2001JP-00365153.
XX PR
XX 29-NOV-2001; 2001JP-00365153.
XX PA
XX (RAKA-) RAKAN KK.
XX PA (GIFU-) GIFU DATGAKUCHO.
XX
XX WPI; 2003-793230/75.
XX DR
XX
XX Rapid, sensitive detection of specific or unspecified microbes causing
XX PT diarrhea and food poisoning, using primers which target universal and
XX PT specific genes, and amplifying by PCR under heat cycle conditions
XX PT suitable for many detections.
XX PS
XX Claim 1; SEQ ID NO 195; 69pp; Japanese.
XX
XX The present invention relates to a method for detecting microorganisms
XX CC using primers (ADP90918-ADP91145). The method is used for detecting
XX CC microorganisms (bacteria, fungi, protozoa, viruses) which cause diarrhoea
XX CC symptoms, and pathogenic microbes of food poisoning. The method can be
XX CC used to detect unspecified microbes, or specific pathogens, or for the
XX CC simultaneous detection of many kinds of microorganism.
XX
SQ
SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 605 CATCATTTCTGCCCTCC 621
DB 2 CATCATTTCTGCCCTCC 18
RESULT 2595
ABZ98590/c
ID ABZ98590 standard; DNA; 20 BP.
XX
XX ABZ98590;
AC
XX
XX 17-OCT-2003 (first entry)
DE
XX Human tryptase a oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX KW antiinflammatory steroid; ubiquitinone; antiinflammatory; antiallergic;
XX KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX PF
XX 24-APR-2001; 2001US-0286137P.
XX PR
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;

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XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13632; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 4 A; 8 C; 8 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
QY 158 GCTGCTGGCGCTGCTG 174  
Db 17 GCTGCTGGCGCTGCTG 1  
XX  
RESULT 2596  
ABZ92541/C  
ID ABZ92541 standard; DNA: 20 BP.  
XX  
AC ABZ92541;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX OS  
XX PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX PA  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;

XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 7763; 872pp; English.  
XX  
CC The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 6 C; 1 G; 8 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
QY 4572 AAAGAAGTCAAGATTGA 4588  
Db 18 AAAGAAGTCAAGATTGA 2  
XX  
RESULT 2597  
ABZ87469  
ID ABZ87469 standard; DNA: 20 BP.  
XX  
AC ABZ87469;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human oligonucleotide sequence.  
XX  
KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX OS  
XX PN WO200285308-A2.  
XX  
PD 31-OCT-2002.  
XX  
PF 23-APR-2002; 2002WO-US013135.  
XX  
PR 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX PA  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;



```

XX DR WPI; 2003-229219/22.
XX
XX PT Pharmaceutical composition for treating ailments associated with impaired
XX PT respiration, has oligo(s) antisense to specific gene(s) or its
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX PT ubiquinone.
XX
XX PS Disclosure; SEQ ID NO 2711; 872bp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and a second active agent comprising an
CC antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1093 CCGAAGCTGTTTGAAG 1109
Db 2 CCAAGCTGTTTGAAG 18
XX
RESULT 2598
ABD28771/c
XX ID ABD28771 standard; DNA; 20 BP.
XX
AC ABD28771;
XX
XX 29-JUL-2004 (first entry)
XX
DE R44202-derived oligonucleotide SEQ ID 7783.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX KM surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KM pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX PN WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002MO-US013143.
XX
XX PR 24-APR-2001; 2001US-0286036P.
XX
XX PA (EPIC-) EPIDENESIS PHARM INC.
XX

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PI NYce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX
XX PT Pharmaceutical composition for treating asthma, has antisense
XX PT oligonucleotide containing less percentage of adenosine, targeted to
XX PT nucleic acids associated with lung airway or lung dysfunction, and
XX PT bronchodilating agent.
XX
XX PS Claim 15; SEQ ID NO 7783; 763bp; English.
XX
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, allergies and/or surfactant hypoproduction are associated
CC inflammation, allergies and/or bronchoconstriction and/or lung
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 5 A; 6 C; 1 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 4572 AAAGAAGTCAGATTGA 4588
Db 18 AAAGAAGTCATGATTGA 2
XX
RESULT 2599
ABD31621/c
XX ID ABD31621 standard; DNA; 20 BP.
XX
AC ABD31621;
XX
XX 29-JUL-2004 (first entry)
XX
DE Human Trypsin a-derived oligonucleotide SEQ ID 13832.
XX
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX KM respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX KM surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX KM analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX KM beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX KM respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX KM emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX KM pulmonary transplantation rejection; ss; primer.
XX

```

OS Homo sapiens.  
 XX WO200285309-A2.  
 XX  
 XX 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013143.  
 XX  
 XX 24-APR-2001; 2001US-0286036P.  
 XX  
 XX (EPIC-) EPIGENESIS PHARM INC.  
 PA  
 PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 PI  
 XX WPI; 2003-093058/08.  
 DR  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 PT  
 XX  
 PS Claim 15; SEQ ID NO 13832; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 CC  
 XX  
 SO Sequence 20 BP; 4 A; 8 C; 8 G; 0 T; 0 U; 0 Other:  
 Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 158 GCTGCTGGCGCTGCCG 174  
 Db 17 GCTGCTGGCGCTGCCG 1  
 RESULT 2600  
 ABD23699  
 ID ABD23699 standard; DNA; 20 BP.  
 XX  
 AC ABD23699;  
 XX  
 DT 29-JUL-2004 (first entry)

XX  
 DE Human myosin X-derived oligonucleotide SEQ ID 2711.  
 XX  
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 KW  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200285309-A2.  
 XX  
 XX 31-OCT-2002.  
 XX  
 XX 23-APR-2002; 2002WO-US013143.  
 XX  
 XX 24-APR-2001; 2001US-0286036P.  
 XX  
 XX (EPIC-) EPIGENESIS PHARM INC.  
 PA  
 PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 PI  
 XX WPI; 2003-093058/08.  
 DR  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 PT  
 XX  
 PS Claim 15; SEQ ID NO 2711; 763pp; English.  
 XX  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 CC  
 XX  
 SO Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other:  
 Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
OY      1093 CCGAGCTGTTTGAAG 1109
      |||||
Db      2 CCAAGCTGTTTGAAG 18
      |||||

RESULT 2601
ADH54752
ID      ADH54752 standard; DNA; 20 BP.
XX
XX      ADH54752;
XX
XX      25-MAR-2004 (first entry)
XX
XX      Human VEGF-C antisense oligonucleotide ISIS 196825.
XX
XX      human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;
XX      diabetic retinopathy; autoimmune disorder; inflammatory disorder;
XX      vascular endothelial growth factor; antisense.
XX
XX      Synthetic.
XX      Homo sapiens.
XX      US2003232437-A1.
XX      18-DEC-2003.
XX      17-JUN-2002; 2002US-00173718.
XX      17-JUN-2002; 2002US-00173718.
XX      17-JUN-2002; 2002US-00173718.
XX      (ISIS-) ISIS PHARM INC.
XX      Zhang H, Dobie KW;
XX      WPI; 2004-061284/06.
XX
XX      New compounds, particularly antisense oligonucleotides targeted to a
XX      nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
XX      useful for treating atherosclerosis, diabetic retinopathy, or
XX      inflammatory disorders.
XX      Example 15; SEQ ID NO 53; 83bp; English.
XX
XX      The invention relates to a compound targeted to and which specifically
XX      hybridizes with a nucleic acid molecule encoding VEGF-C, and inhibits the
XX      expression of VEGF-C. The compound, composition and methods are useful
XX      for treating a disease or condition associated with VEGF-C, such as a
XX      cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or
XX      an autoimmune or inflammatory disorder. They are also useful in research
XX      and diagnostics for modulating the expression of VEGF-C. The present
XX      sequence represents a human VEGF-C antisense oligonucleotide.
XX
XX      Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match      0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      640 AAGAGCCGACGCAAGTG 656
      |||||
Db      1 AAGAGCCGACGCAAGTG 17
      |||||

RESULT 2602
ADH54806/C
ID      ADH54806 standard; DNA; 20 BP.
XX
XX      ADH54806;
XX
XX      25-MAR-2004 (first entry)
XX
XX      Human VEGF-C target region ISIS 114957.
XX
```

```
KW      human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;
KW      diabetic retinopathy; autoimmune disorder; inflammatory disorder;
KW      vascular endothelial growth factor.
XX
XX      Homo sapiens.
XX      US2003232437-A1.
XX      18-DEC-2003.
XX      17-JUN-2002; 2002US-00173718.
XX      17-JUN-2002; 2002US-00173718.
XX      17-JUN-2002; 2002US-00173718.
XX      (ISIS-) ISIS PHARM INC.
XX      Zhang H, Dobie KW;
XX      WPI; 2004-061284/06.
XX
XX      New compounds, particularly antisense oligonucleotides targeted to a
XX      nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
XX      useful for treating atherosclerosis, diabetic retinopathy, or
XX      inflammatory disorders.
XX      Example 15; SEQ ID NO 107; 83bp; English.
XX
XX      The invention relates to a compound targeted to and which specifically
XX      hybridizes with a nucleic acid molecule encoding VEGF-C, and inhibits the
XX      expression of VEGF-C. The compound, composition and methods are useful
XX      for treating a disease or condition associated with VEGF-C, such as a
XX      cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or
XX      an autoimmune or inflammatory disorder. They are also useful in research
XX      and diagnostics for modulating the expression of VEGF-C. The present
XX      sequence represents a human VEGF-C target region.
XX
XX      Sequence 20 BP; 2 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

Query Match      0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      640 AAGAGCCGACGCAAGTG 656
      |||||
Db      20 AAGAGCCGACGCAAGTG 4
      |||||

RESULT 2603
AD132993/C
ID      AD132993 standard; DNA; 20 BP.
XX
XX      AD132993;
XX
XX      22-APR-2004 (first entry)
XX
XX      Antisense 2'-MOE gapmer oligo targeted to human GPCR 49 - SEQ ID 12.
XX
XX      G protein-coupled receptor 49; GPCR; neuroprotective; neural;
XX      endocrine system disorder; gene therapy; antisense therapy; human; ss;
XX      phosphorothioate backbone; 2'-MOE wing; 2'-methoxyethyl.
XX
XX      Homo sapiens.
XX      Synthetic.
XX      US2003235910-A1.
XX      25-DEC-2003.
XX      17-JUN-2002; 2002US-00174456.
XX      17-JUN-2002; 2002US-00174456.
XX      17-JUN-2002; 2002US-00174456.
XX      (ISIS-) ISIS PHARM INC.
XX
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XX Monia BP, Freier SM;  
XX WPI; 2004-070584/07.  
XX  
XX  
XX New antisense oligonucleotide comprising a sequence targeted to a nucleic  
XX acid encoding G protein-coupled receptor 49, useful for preparing a  
XX composition for treating e.g., neural or endocrine system disorder.  
XX  
XX Example 15; SEQ ID NO 12; 60bp; English.  
XX  
XX The invention relates to a novel compound comprising a sequence targeted  
XX to a nucleic acid encoding G protein-coupled receptor (GPCR) 49, that  
XX specifically hybridises with the nucleic acid encoding G protein-coupled  
XX receptor 49 and inhibits its expression. The compound of the invention  
XX demonstrates neuroprotective activity and may be useful for preparing a  
XX composition for treating neural or endocrine system disorders, as well as  
XX during gene and antisense therapy. The current sequence is that of the  
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
XX targeted to human G protein-coupled receptor (GPCR) 49. The  
XX oligonucleotide is flanked on both sides by 5-nucleotide 2'-MOE wings and  
XX has a phosphorothioate backbone. All cytidine residues are 5-  
XX methylcytidines.  
XX  
XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;  
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX 181 TGCTGCTGCTGCTGCG 197  
XX |||||  
XX 18 TGCTGCTGCTGCTGCG 2  
XX  
XX  
XX RESULT 2604  
XX ADI33071  
XX ID ADI33071 standard; DNA; 20 BP.  
XX  
XX AC ADI33071;  
XX  
XX DT 22-APR-2004 (first entry)  
XX  
XX DE Human GPCR 49 antisense therapy target DNA - SEQ ID 90.  
XX  
XX XX G protein-coupled receptor 49; GPCR; neuroprotective; neural;  
XX KM endocrine system disorder; gene therapy; antisense therapy; human; ss.  
XX OS Homo sapiens.  
XX  
XX PN US2003235910-A1.  
XX  
XX PD 25-DEC-2003.  
XX  
XX PF 17-JUN-2002; 2002US-00174456.  
XX  
XX PR 17-JUN-2002; 2002US-00174456.  
XX  
XX PA (ISIS-) ISIS PHARM INC.  
XX  
XX PI Monia BP, Freier SM;  
XX  
XX DR WPI; 2004-070584/07.  
XX  
XX PT New antisense oligonucleotide comprising a sequence targeted to a nucleic  
XX acid encoding G protein-coupled receptor 49, useful for preparing a  
XX composition for treating e.g., neural or endocrine system disorder.  
XX  
XX Example 15; SEQ ID NO 90; 60bp; English.  
XX  
XX The invention relates to a novel compound comprising a sequence targeted  
XX to a nucleic acid encoding G protein-coupled receptor (GPCR) 49, that  
XX specifically hybridises with the nucleic acid encoding G protein-coupled

CC receptor 49 and inhibits its expression. The compound of the invention  
CC demonstrates neuroprotective activity and may be useful for preparing a  
CC composition for treating neural or endocrine system disorders, as well as  
CC during gene and antisense therapy. The current sequence is that of the  
CC human G protein-coupled receptor (GPCR) 49 antisense therapy target DNA  
CC of the invention.  
XX  
XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;  
XX  
XX  
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;  
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
XX  
XX 181 TGCTGCTGCTGCTGCG 197  
XX |||||  
XX 3 TGCTGCTGCTGCTGCG 19  
XX  
XX  
XX RESULT 2605  
XX ADJ60469/c  
XX ID ADJ60469 standard; DNA; 20 BP.  
XX  
XX AC ADJ60469;  
XX  
XX DT 06-MAY-2004 (first entry)  
XX  
XX DE Oligonucleotide associated to Trypsin-a #5.  
XX  
XX KM interleukin; IL-4 receptor; IL-5 receptor; lung disease;  
XX KM airway inflammation; allergy; asthma; impeded respiration;  
XX KM cystic fibrosis; acute respiratory distress syndrome;  
XX KM pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;  
XX ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO2004011613-A2.  
XX  
XX PD 05-FEB-2004.  
XX  
XX PF 25-JUL-2003; 2003WO-US023509.  
XX  
XX PR 29-JUL-2002; 2002US-0399076P.  
XX  
XX PA (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;  
XX PI Shahabuddin S, Lu H, Cong H;  
XX  
XX DR WPI; 2004-203534/19.  
XX  
XX PT Novel single or multiple target oligonucleotide anti-sense to e.g.  
XX PT initiation codons and introns of respiratory disease-relevant genes e.g.,  
XX PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory  
XX PT disease e.g., asthma.  
XX  
XX PS Claim 2; SEQ ID NO 1325; 85bp; English.  
XX  
XX XX The present invention relates to an oligonucleotide anti-sense to e.g.,  
XX CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-  
XX CC end of nucleic acid target comprising gene(s) chosen from e.g.  
XX CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the  
XX CC oligonucleotide. The method is useful for preventing or treating the  
XX CC respiratory or lung disease, which involves administering to the airways  
XX CC of a subject an effective amount of an inhibitor. The oligonucleotide is  
XX CC useful for production of a medicament for the prevention and/or treatment  
XX CC of a respiratory or lung disease. The respiratory or lung disease is  
XX CC chosen from airway inflammation, allergy(ies), asthma, impeded  
XX CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases  
XX CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome  
XX CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway  
XX CC obstruction. The present sequence represents an oligonucleotide of the

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CC invention.
SQ Sequence 20 BP; 4 A; 8 C; 8 G; 0 T; 0 U; 0 Other;
Query Match
  Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 158 GCTGCTGGCGCTGCTG 174
  17 GCTGCTGGCGCTGCTG 1
Db
RESULT 2606
AAL52398/C
ID AAL52398 standard; DNA; 20 BP.
XX
AC AAL52398;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human secretory phospholipase A2 group IIA gene PCR primer #1.
XX
KW Human; secretory phospholipase A2 group IIA; sPLA2GIIA; coronary;
KW cardiopathy; angina pectoris; myocardial infarction; heart failure;
KW hypertension; arteriosclerosis; vascular disease; renal disease;
KW inflammatory disease; impaired erection; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003105900-A1.
XX
PD 24-DEC-2003.
XX
PF 04-JUN-2003; 2003WO-EP005826.
XX
PR 17-JUN-2002; 2002DE-01026934.
XX
PA (FARB) BAYER AG.
XX
PI Andree B, Eillinghaus P, Kast R;
XX
DR WPI; 2004-071502/07.
XX
PT Use of inhibitors of secretory phospholipase A2, group IIA, for treating
PT or preventing e.g. coronary heart disease, hypertension and inflammation.
XX
PS Disclosure; Page 22; Opp; German.
XX
CC The present invention relates to the use of antagonists or inhibitors of
CC sPLA2GIIA (secretory phospholipase A2, group IIA) for the treatment
CC and/or prevention of coronary heart disease, hypertension, the
CC consequences of atherosclerosis, kidney or vascular diseases,
CC inflammation and erectile dysfunction. Antagonists and inhibitors are
CC used to treat and/or prevent coronary heart disease, hypertension, the
CC consequences of atherosclerosis, kidney or vascular diseases,
CC inflammation and erectile dysfunction, especially (un)stable angina
CC pectoris; acute myocardial infarction; sudden heart death and cardiac
CC insufficiency. The present sequence is a PCR primer used to isolate the
CC human sPLA2GIIA coding sequence
XX
SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
Query Match
  Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4980 TCACTAATTCCTCATGG 4996
  18 TCACCAATTCCTCATGG 2
Db
RESULT 2607

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ADU15888
ID ADU15888 standard; DNA; 20 BP.
XX
AC ADU15888;
XX
DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 438.
XX
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipemic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /label= OTHER= phosphorothioate backbone
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT cytidine nucleobases are 5-methylcytidine."
XX
PN WO2004003201-A2.
XX
PD 08-JAN-2004.
XX
PF 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Kane CD;
XX
DR WPI; 2004-083058/08.
XX
PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidaemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS Example 15; SEQ ID NO 438; 909pp; English.
XX
CC This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit

```

CC cytosolic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,  
CC litholytic, antiinflammatory and virucidal activities. This  
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the  
CC expression of the human LRH1 protein of the invention.

CC Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3024 TGCAGCAGCTCTTCC 3040  
|||||  
1 TACAGCAGCTCTTCC 17

RESULT 2608

ADJ15664  
ID ADJ15664 standard; DNA; 20 BP.

AC ADJ15664;

XX 20-MAY-2004 (first entry)

DE Antisense DNA oligo used to modulate human LRH1 expression SegID 214.

XX human; ss; liver related homologue-1; LRH1, NR5A2; antisense;  
XX phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
XX gall stone; triglyceridaemia; obesity; hepatitis;  
XX hepatocellular carcinoma; aromatase; cytostatic; antilipemic;  
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
XX antiinflammatory; virucidal.

OS Homo sapiens.  
OS Synthetic.

XX Key Location/Qualifiers  
FH modified\_base 1..20  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /label= OTHER= phosphorothioate backbone

FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."  
FT modified\_base 16..20  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
FT cytidine nucleobases are 5-methylcytidine."

XX WO2004003201-A2.  
XX 08-JAN-2004.  
XX 01-JUL-2003; 2003WO-US020865.  
XX 01-JUL-2002; 2002US-0392813P.

XX (PHAA ) PHARMACIA CORP.  
XX Kane CD;  
XX WPI; 2004-083058/08.

XX New antisense oligonucleotides targeted to a nucleic acid encoding liver  
PT related homologue-1 (LRH1), useful for treating breast cancer,  
XX dyslipidaemia, atherosclerosis, hypercholesterolemia, or hepatitis.  
XX Example 15; SEQ ID NO 214; 909pp; English.

CC This invention relates to novel antisense compounds useful for modulating  
CC the expression of liver related homologue-1 (LRH1) and splice variants  
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in  
CC length that target a portion of an active site on the nucleic acid  
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan  
CC nuclear receptor protein that functions as a tissue specific  
CC transcription factor. The present invention describes antisense  
CC oligonucleotides that comprise at least one modified internucleoside  
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,  
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-  
CC methylcytidine. These antisense compounds are useful for treating or  
CC diagnosing a disease associated with LRH1, such as breast cancer,  
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high  
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,  
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic  
CC hepatitis, as well as hepatocellular carcinoma or a condition associated  
CC with aromatase activity. Accordingly, these compositions exhibit  
CC cytosolic, antilipemic, antiarteriosclerotic, anorectic, hepatotropic,  
CC litholytic, antiinflammatory and virucidal activities. This  
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the  
CC expression of the human LRH1 protein of the invention.

CC Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3023 TTGCAGCAGCTCTTC 3039  
|||||  
Db 4 TTACAGCAGCTCTTC 20

RESULT 2609

ADK73892  
ID ADK73892 standard; DNA; 20 BP.

AC ADK73892;

XX 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1226.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-hepetic neuralgia;  
XX diabetic neuropathy; arthritic pain; migraine headache;  
XX infantile epilepsy; ataxia; ss.

XX Synthetic.

XX WO2004016754-A2.  
XX 14-AUG-2003; 2003WO-US025465.  
XX 26-FEB-2004.  
XX 14-AUG-2002; 2002US-0403416P.

XX (PHAA ) PHARMACIA CORP.  
XX Roberds SL;  
XX WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT Nav1.3, useful for treating a disease or condition associated  
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 1226; 417pp; English.

XX The present invention relates to an antisense compound targeted to a  
CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
CC specifically hybridizes with and inhibits the expression of Nav1.3. The

CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a decoy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target  
 CC different regions of the human Nav1.3 RNA.

SQ Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2358 GATTAACATGACGACGA 2374  
 |||||  
 DB 3 GATTAACATGACGACGA 19

# RESULT 2610

ADK80284  
 ADK80284 standard; DNA; 20 BP.

AC ADR80284;

DT 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7618.

KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;  
 KM diabetic neuropathy; arthritic pain; migraine headache;  
 KM infantile epilepsy; ataxia; ss.

OS Synthetic.

PN WO2004016754-A2.

PD 26-FEB-2004.

PF 14-AUG-2003; 2003WO-US025465.

PR 14-AUG-2002; 2002US-0403416P.

PA (PHAA ) PHARMACIA CORP.

PI Roberts SL;

DR WPI; 2004-203785/19.

PT New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 7618; 417pp; English.

CC The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The  
 CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a decoy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target

CC different regions of the human Nav1.3 RNA.

SQ Sequence 20 BP; 12 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2352 AAAGATGATTAACATGA 2368  
 |||||  
 DB 1 AAAGATGATTAACATGA 17

# RESULT 2611

ADK73597  
 ADK73597 standard; DNA; 20 BP.

AC ADK73597;

DT 20-MAY-2004 (first entry)

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #931.

KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;  
 KM diabetic neuropathy; arthritic pain; migraine headache;  
 KM infantile epilepsy; ataxia; ss.

OS Synthetic.

PN WO2004016754-A2.

PD 26-FEB-2004.

PF 14-AUG-2003; 2003WO-US025465.

PR 14-AUG-2002; 2002US-0403416P.

PA (PHAA ) PHARMACIA CORP.

PI Roberts SL;

DR WPI; 2004-203785/19.

PT New antisense compound targeted to a nucleic acid molecule encoding  
 PT Nav1.3, useful for treating a disease or condition associated  
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure  
 PT disorder, or ataxia.

PS Claim 4; SEQ ID NO 931; 417pp; English.

CC The present invention relates to an antisense compound targeted to a  
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound  
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The  
 CC compound and composition are useful for treating a disease or condition  
 CC associated with Nav1.3, e.g. pain including but not limited to  
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,  
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,  
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate  
 CC headache; seizure disorder such as childhood seizure disorder, including  
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present  
 CC sequence represents a chimeric phosphorothioate oligonucleotide with  
 CC 2'MOE wings and a decoy gap. Used during the antisense inhibition of  
 CC human Nav1.3 expression, the oligonucleotides are designed to target  
 CC different regions of the human Nav1.3 RNA.

SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2358 GATTAACATGACGACGA 2374  
 |||||

DB	1	GATTAACATGACCAGGA	17
RESULT 2612			
ID	ADK73650	standard; DNA; 20 BP.	
XX	ADK73650;		
AC	ADK73650;		
XX			
DT	20-MAY-2004	(first entry)	
XX			
DE	Chimeric phosphorothioate oligonucleotide to target Nav1.3 #984.		
XX			
KM	Nav1.3. Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;		
KW	diabetic neuropathy; arthritic pain; migraine headache;		
KX	infantile epilepsy; ataxia; ss.		
OS	Synthetic.		
PN	WO2004016754-A2.		
XX			
PD	26-FEB-2004.		
XX			
PF	14-AUG-2003; 2003WO-US025465.		
XX			
PR	14-AUG-2002; 2002US-0403416P.		
XX			
PA	(PHAA ) PHARMACIA CORP.		
XX			
PI	Roberde SL;		
XX			
DR	WPI; 2004-203785/19.		
PT			
PT	New antisense compound targeted to a nucleic acid molecule encoding		
PT	Nav1.3, useful for useful for treating a disease or condition associated		
PT	with Nav1.3, e.g. pain, seizure disorder such as childhood seizure		
PT	disorder, or ataxia.		
XX			
PS	Claim 4; SEQ ID NO 984; 417bp; English.		
XX			
CC	The present invention relates to an antisense compound targeted to a		
CC	nucleic acid molecule encoding Nav1.3, where the antisense compound		
CC	specifically hybridizes with and inhibits the expression of Nav1.3. The		
CC	compound and composition are useful for treating a disease or condition		
CC	associated with Nav1.3, e.g. pain including but not limited to		
CC	neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,		
CC	diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,		
CC	pain from burns, migraine headache, cluster headache, mild-to-moderate		
CC	headache; seizure disorder such as childhood seizure disorder, including		
CC	but not limited to neonatal or infantile epilepsy; or ataxia. The present		
CC	sequence represents a chimeric phosphorothioate oligonucleotide with		
CC	2'MOE wings and a deoxy gap. Used during the antisense inhibition of		
CC	human Nav1.3 expression, the oligonucleotides are designed to target		
CC	different regions of the human Nav1.3 RNA.		
XX			
SEQ	Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;		
Query Match	0.1%;	Score 15.4;	DB 1; Length 20;
Best Local Similarity	94.1%;	Pred. No. 1.8e+03;	
Matches 16; Conservative	0;	Mismatches 1;	Indels 0; Gaps 0;
OY	2358	GATTAACATGACGAGGA	2374
DB	4	GATTAACATGACGAGGA	20
RESULT 2613			
ID	ADK78123	standard; DNA; 20 BP.	
XX	ADK78123;		
AC	ADK78123;		
XX			
DT	20-MAY-2004	(first entry)	

XX	Chimeric phosphorochioate oligonucleotide to target Nav1.3 #5457.
DE	
KW	Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW	diabetic neuropathy; arthritic pain; migraine headache;
KW	infantile epilepsy; ataxia; ss.
XX	
OS	Synthetic.
XX	
PN	WO2004016754-A2.
XX	
PD	26-FEB-2004.
XX	
PF	14-AUG-2003; 2003WO-US025465.
XX	
PR	14-AUG-2002; 2002US-0403416P.
XX	
PA	(PHAA ) PHARMACIA CORP.
XX	
P1	Roberds SL;
XX	
DR	WPI; 2004-203785/19.
XX	
PT	New antisense compound targeted to a nucleic acid molecule encoding
PT	Nav1.3, useful for useful for treating a disease or condition associated
PT	with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT	disorder, or ataxia.
XX	
PS	Claim 4; SEQ ID NO 5457; 417pp; English.
XX	
CC	The present invention relates to an antisense compound targeted to a
CC	nucleic acid molecule encoding Nav1.3, where the antisense compound
CC	specifically hybridizes with and inhibits the expression of Nav1.3. The
CC	compound and composition are useful for treating a disease or condition
CC	associated with Nav1.3, e.g. pain including but not limited to
CC	neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC	diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC	pain from burns, migraine headache, cluster headache, mild-to-moderate
CC	headache; seizure disorder such as childhood seizure disorder, including
CC	but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC	sequence represents a chimeric phosphorochioate oligonucleotide with
CC	2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC	human Nav1.3 expression, the oligonucleotides are designed to target
CC	different regions of the human Nav1.3 RNA.
XX	
XX	
SO	Sequence 20 BP; 10 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
XX	
Query Match	0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity	94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative	0; Mismatches 1; Indels 0; Gaps 0;
XX	
CY	2350 CCNAGATGATTAACAT 2366
DB	4 CCNAGATGATTAACAT 20
XX	
RESULT 2614	
ADK73783	
ID	ADK73783 standard; DNA; 20 BP.
XX	
AC	ADK73783;
XX	
DT	20-MAY-2004 (first entry)
XX	
DE	Chimeric phosphorochioate oligonucleotide to target Nav1.3 #1117.
XX	
KW	Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW	diabetic neuropathy; arthritic pain; migraine headache;
KW	infantile epilepsy; ataxia; ss.
XX	
OS	Synthetic.
XX	
PN	WO2004016754-A2.



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XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003MO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX Nav1.3, useful for useful for treating a disease or condition associated
XX with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 1117; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
XX nucleic acid molecule encoding Nav1.3, where the antisense compound
XX specifically hybridizes with and inhibits the expression of Nav1.3. The
XX compound and composition are useful for treating a disease or condition
XX associated with Nav1.3, e.g. pain including but not limited to
XX neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX pain from burns, migraine headache, cluster headache, mild-to-moderate
XX headache; seizure disorder such as childhood seizure disorder, including
XX but not limited to neonatal or infantile epilepsy or ataxia. The present
XX sequence represents a chimeric phosphorothioate oligonucleotide with
XX 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX human Nav1.3 expression, the oligonucleotides are designed to target
XX different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 2358 GATAAATGAGCAGGA 2374
XX |||||
XX 2 GATAAATGAGCAGGA 18
XX
XX RESULT 2615
XX ADM98326/C
XX ID ADM98326 standard; DNA; 20 BP.
XX
XX AC ADM98326;
XX
XX 01-JUL-2004 (first entry)
XX
XX PCR primer used to amplify a human APOB Thr981le mutation SegID 2.
XX
XX APOB; PCR; primer; ss; genetic mutation; human; cardiovascular disease;
XX alpha2b-adrenoreceptor; apolipoprotein B;
XX dimethylarginine dimethylaminohydrolase 1; fibrinogen-beta;
XX natriuretic peptide precursor A; neurotensin Y;
XX cystathione beta synthase; glycoprotein IIb/IIIa; lipoprotein lipase;
XX coronary heart disease; myocardial infarction; MI.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX WO2004031407-A1.
XX
XX 15-APR-2004.
XX
XX 07-OCT-2003; 2003MO-FI000740.
XX
XX 07-OCT-2002; 2002FI-00001783.
XX

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XX (JURILAB LTD OY.
XX
XX Salonen JT, Tuomainen T, Pirkkanen M;
XX
XX WPI; 2004-347978/32.
XX
XX Detecting risk of cardiovascular disease by detecting mutations in genes
XX encoding alpha2b-adrenoreceptors and apolipoprotein B.
XX
XX Disclosure; SEQ ID NO 2; 42pp; English.
XX
XX This invention relates to a novel method for detecting genetic variations
XX or polymorphisms in genes related to cardiovascular disease.
XX Specifically, it refers to the identification of a mutation in the genes
XX encoding alpha2b-adrenoreceptor and apolipoprotein B, as well as a
XX mutation in at least one of the genes encoding dimethylarginine
XX dimethylaminohydrolase 1, fibrinogen-beta, natriuretic peptide precursor
XX A, neurotensin Y, cystathione beta synthase, glycoprotein IIb/IIIa or
XX lipoprotein lipase. The present invention describes that detecting a
XX mutation in at least three of these genes can be used diagnostically to
XX indicate an increased risk of coronary heart disease and/or myocardial
XX infarction (MI). The method further comprises combining information
XX concerning age, gender, the family history of cardiovascular diseases and
XX hypercholesterolaemia and the medical history concerning cardiovascular
XX diseases of the subject with the results obtained from the method above
XX for confirming the indication obtained from the detection step. This
XX oligonucleotide sequence is a PCR primer used to detect a specific
XX mutation in human apolipoprotein B (APOB), given in an exemplification of
XX the invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 500 AGCCATGTCAGGTATG 516
XX |||||
XX 20 AGCCATGTCAGGTATG 4
XX
XX RESULT 2616
XX ADO26445
XX ID ADO26445 standard; DNA; 20 BP.
XX
XX AC ADO26445;
XX
XX 01-JUL-2004 (first entry)
XX
XX PCR primer CFI for human CFTR DNA spanning exon 10.
XX
XX Homologous recombination; targeted sequence modification; recombinase;
XX homology clamp; genetic disease; disease allele; CFTR; exon 10; p53;
XX human; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX US2004019916-A1.
XX
XX 29-JAN-2004.
XX
XX 03-MAR-2003; 2003US-00379182.
XX
XX 24-APR-1992; 92US-00873438.
XX
XX 05-AUG-1997; 97US-00906379.
XX
XX (ZARL/) ZARLING D A.
XX (SENA/) SENNA B P.
XX
XX Zarling DA, Sena EP;
XX
XX WPI; 2004-132241/13.
XX

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XX Targeting and altering by homologous recombination, a pre-selected target
PT DNA sequence in a eukaryotic cell to make a targeted sequence
PT modification by introducing into eukaryotic cell, a recombinase and
PT targeting polynucleotide.
XX
XX Example 3; Page 18; 31pp; English.
XX
CC The present invention relates to a method for targeting and altering by
CC homologous recombination, a pre-selected target DNA sequence in a
CC eukaryotic cell to make a targeted sequence modification. The method
CC comprises introducing into at least one eukaryotic cell at least one
CC recombinase and at least one targeting polynucleotide having a homology
CC clamp that substantially corresponds to or is substantially complementary
CC to a pre-selected target DNA sequence. Also disclosed are: a composition
CC for producing a targeted modification of an endogenous DNA sequence, a
CC kit for therapy, monitoring or prophylaxis of a genetic disease
CC comprising a recombinase and a targeting polynucleotide, a method for
CC administering to the animal the composition consisting essentially of a
CC targeting polynucleotide for correcting the disease allele and a
CC recombinase, and an animal comprising an allele that has been corrected
CC according to the method cited above. The targeted sequence modification
CC comprises a deletion or addition of at least one additional nucleotide.
CC The targeted sequence modification corrects a human disease allele (e.g.
CC CPTFR, p53) in a human cell. The recombinase and the targeting
CC polynucleotide are introduced into the eukaryotic cell simultaneously by
CC a method selected from microinjection, electroporation, or contacting of
CC the cell with a lipid-protein-targeting polynucleotide complex. The
CC method is useful for targeting and altering by homologous recombination,
CC a pre-selected target DNA sequence in a eukaryotic cell to make a
CC targeted sequence modification. The present sequence represents a PCR
CC primer used in the examples of the present invention.
XX
SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3770 CAGAGTCCTGAAACAG 3786
Db 2 CAGAGTACTGTAACAG 18
XX
RESULT 2617
ADM11408
XX ADM11408 standard; DNA; 20 BP.
XX
AC ADM11408;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human CDC14A DNA antisense oligonucleotide #2.
XX
XX Human, CDC14A; ss; antisense oligonucleotide; phosphorothioate linkage;
KM 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
XX hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004077085-A1.
XX
PD 22-APR-2004.
XX
PF 17-OCT-2002; 2002US-00274387.
XX
PR 17-OCT-2002; 2002US-00274387.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM;
XX

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DR WPI; 2004-340010/31.
XX
XX New antisense oligonucleotides for modulating CDC14A expression, useful
PT for diagnosing, preventing or treating diseases or conditions associated
PT with CDC14A, such as a hyperproliferative disorder, particularly cancer.
XX
XX Example 15; SEQ ID NO 13; 49pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human CDC14A polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridizes with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human CDC14A polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents an antisense oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGC 192
Db 4 GCTGCTGCTGCTGCTGC 20
XX
RESULT 2618
AD001250
XX AD001250 standard; DNA; 20 BP.
XX
AC AD001250;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human CDC14A antisense oligonucleotide ISIS #131181.
XX
XX Antisense; human; CDC14A protein; cancer; antisense therapy;
KM phosphorothioate; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
XX modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone where all cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004077571-A1.
XX
PD 22-APR-2004.
XX
PF 17-OCT-2002; 2002US-00274311.
XX
PR 17-OCT-2002; 2002US-00274311.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PA (ABBO ) ABBOTT LAB.
XX

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XX  Freier SM, Sathya A, McGonigal T;
PI  WPI; 2004-340036/31.
XX
XX  New antisense compound having a sequence targeted to a nucleic acid
PT  molecule encoding human CDC14A, useful in preparing a composition for
PT  treating a disease or condition associated with CDC14A, e.g., cancer.
XX
XX  Example 15; SEQ ID NO 13; 50pp; English.
XX
XX  The invention relates to antisense compounds targeted to a nucleic acid
CC  molecule encoding human CDC14A protein, to inhibit its expression.
CC  Antisense compounds of the invention are useful in preparing a
CC  composition for treating a disease or condition associated with CDC14A
CC  e.g. cancer. The invention is also useful in antisense gene therapy. The
CC  present sequence is an antisense oligonucleotide targeted to human CDC14A
CC  DNA. This sequence is used in the exemplification of the invention.
XX
SQ  Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 176 GCTGCTGCTGCTGCTGC 192
Db 4 GCTGCTGCTGCTGCTGC 20
RESULT 2619
AD045958/c
ID AD045958 standard; DNA; 20 BP.
XX
AC AD045958;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #1324.
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KM CCR1; CCR3; Boraxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KM trypsinase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KM lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KM asthma; lung allergy; inflammation; inflammatory disease;
KM airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KM chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KM acute respiratory distress syndrome; pulmonary hypertension;
KM lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
OS
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUTH/) LU H.
PA (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX

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DR  WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
XX Claim 2; SEQ ID NO 1325; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Boraxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC trypsinase a, trypsinase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Boraxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC trypsinase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ  Sequence 20 BP; 4 A; 8 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 158 GCTGCTGGCGCTGCTG 174
Db 17 GCTGCTGGCGCTGCTGCG 1
RESULT 2620
AD054593
ID AD054593 standard; DNA; 20 BP.
XX
AC AD054593;
XX
DT 15-JUL-2004 (first entry)
XX
DE Farnesoid X receptor gene expression antisense inhibitory oligo #1966.
XX
XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
KM antiarteriosclerotic; hepatotropic; litholytic; anorectic;
KM neuroprotective; vasotropic; antisense; gene therapy;
KM Farnesoid X receptor; diabetes; immunological disorder;
KM cardiovascular disorder; dyslipidemia; atherosclerosis;
KM high density lipoprotein; low density lipoprotein; hypercholesterolemia;
KM gallstones; hypertriglyceridemia; obesity; neurological disorder;
KM ischemia; reperfusion; diagnostics; prophylaxis.
XX
XX Homo sapiens.
OS
XX WO2004030750-A1.
XX
XX 15-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030353.
XX
XX 25-SEP-2002; 2002US-0413588P.
XX

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XX (PHAA ) PHARMACIA CORP.
XX
XX Kane CD;
XX
XX WPI; 2004-347928/32.
XX
XX New antisense oligonucleotides useful for modulating expression of
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
XX e.g. diabetes, immunological disorders, cardiovascular disorders,
XX gallstones or obesity.
XX
XX Claim 4; SEQ ID NO 1966; 150bp; English.
XX
XX The invention relates to an antisense compound 8-30 nucleobases in length
XX targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
XX where the antisense compound specifically hybridizes with and inhibits
XX the expression of FXR. The composition and methods are useful for
XX inhibiting the expression of FXR (Farnesoid X receptor) in cells or
XX tissues, or for treating diseases or conditions associated with FXR, such
XX as diabetes, immunological disorders, cardiovascular disorders, e.g.
XX dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
XX lipoprotein), elevated LDL (low density lipoprotein) or
XX hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
XX neurological disorders, or ischemia/reperfusion injury. In addition, the
XX composition is used for diagnostics, prophylaxis, or as research reagents
XX or kits. This sequence corresponds to an antisense oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 10 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3415 TTCAGAACAGAAATT 3431
XX |||||
XX 3 TTCAGAAAAAGAAATT 19
XX
XX RESULT 2621
XX ADOS4676
XX ID ADOS4676 standard; DNA; 20 BP.
XX
XX AC ADOS4676;
XX
XX DT 15-JUL-2004 (first entry)
XX
XX DE Farnesoid X receptor gene expression antisense inhibitory oligo #2049.
XX
XX KW ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
XX antiarteriosclerotic; hepatotropic; litholytic; anorectic;
XX neuroprotective; vasotropic; antisense; gene therapy;
XX Farnesoid X receptor; diabetes; immunological disorder;
XX cardiovascular disorder; dyslipidemia; atherosclerosis;
XX high density lipoprotein; low density lipoprotein; hypercholesterolemia;
XX gallstones; hypertriglyceridemia; obesity; neurological disorder;
XX ischemia; reperfusion; diagnostics; prophylaxis.
XX
XX OS Homo sapiens.
XX
XX PN WO2004030750-A1.
XX
XX PD 15-APR-2004.
XX
XX PF 25-SEP-2003; 2003WO-US030353.
XX
XX PR 25-SEP-2002; 2002US-0413588P.
XX
XX PA (PHAA ) PHARMACIA CORP.
XX
XX PI Kane CD;
XX
XX

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DR WPI; 2004-347928/32.
XX
XX New antisense oligonucleotides useful for modulating expression of
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
XX e.g. diabetes, immunological disorders, cardiovascular disorders,
XX gallstones or obesity.
XX
XX Claim 4; SEQ ID NO 2049; 150bp; English.
XX
XX The invention relates to an antisense compound 8-30 nucleobases in length
XX targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
XX where the antisense compound specifically hybridizes with and inhibits
XX the expression of FXR. The composition and methods are useful for
XX inhibiting the expression of FXR (Farnesoid X receptor) in cells or
XX tissues, or for treating diseases or conditions associated with FXR, such
XX as diabetes, immunological disorders, cardiovascular disorders, e.g.
XX dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
XX lipoprotein), elevated LDL (low density lipoprotein) or
XX hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
XX neurological disorders, or ischemia/reperfusion injury. In addition, the
XX composition is used for diagnostics, prophylaxis, or as research reagents
XX or kits. This sequence corresponds to an antisense oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 11 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 15.4; DB 1; Length 20;
XX Best Local Similarity 94.1%; Pred. No. 1.8e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3415 TTCAGAACAGAAATT 3431
XX |||||
XX 1 TTCAGAAAAAGAAATT 17
XX
XX RESULT 2622
XX ADOS4594
XX ID ADOS4594 standard; DNA; 20 BP.
XX
XX AC ADOS4594;
XX
XX DT 15-JUL-2004 (first entry)
XX
XX DE Farnesoid X receptor gene expression antisense inhibitory oligo #1967.
XX
XX KW ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
XX antiarteriosclerotic; hepatotropic; litholytic; anorectic;
XX neuroprotective; vasotropic; antisense; gene therapy;
XX Farnesoid X receptor; diabetes; immunological disorder;
XX cardiovascular disorder; dyslipidemia; atherosclerosis;
XX high density lipoprotein; low density lipoprotein; hypercholesterolemia;
XX gallstones; hypertriglyceridemia; obesity; neurological disorder;
XX ischemia; reperfusion; diagnostics; prophylaxis.
XX
XX OS Homo sapiens.
XX
XX PN WO2004030750-A1.
XX
XX PD 15-APR-2004.
XX
XX PF 25-SEP-2003; 2003WO-US030353.
XX
XX PR 25-SEP-2002; 2002US-0413588P.
XX
XX PA (PHAA ) PHARMACIA CORP.
XX
XX PI Kane CD;
XX
XX
XX WPI; 2004-347928/32.
XX
XX New antisense oligonucleotides useful for modulating expression of
XX Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
XX e.g. diabetes, immunological disorders, cardiovascular disorders,

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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g., dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagent or kits. This sequence corresponds to an antisense oligonucleotide of the invention.

Sequence 20 BP; 11 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

Query Match            0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps

Oy         3415 TTCAGAACAAAGAAAATT 3431  
Db         4 TTTCAGAAAAAAGAAAATT 20  
||| ||| ||| ||| ||| ||| |||  
TTTCAGAAAAAAGAAAATT 20

RESULT 2623

ADOS4582  
ID ADOS4582 standard; DNM; 20 BP.  
XX  
AC  
XX  
ADOS4582;  
DT 15-JUL-2004 (first entry)

Farnesoid X receptor gene expression antisense inhibitory oligo #1955.

XX  
DE  
XX ss; antidiabetic; immunesuppressive; cardiovascular; antilipemic;  
KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;  
KW neuroprotective; vasotrophic; antisense; gene therapy;  
KW Farnesoid X receptor; diabetes; immunological disorder;  
KW cardiovascular disorder; dyslipidemia; atherosclerosis;  
KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;  
KW gallstones; hypertriglyceridemia; obesity; neurological disorder;  
KW ischemia; reperfusion; diagnostics; propylaxis.  
XX  
SS Homo sapiens.  
XX OS  
XX PN WO2004030750-A1.  
XX PD  
XX DD 15-APR-2004.  
XX PF 25-SEP-2003; 2003WO-US030353.  
XX PR 25-SEP-2002; 2002US-0413588P.  
XX PA (PHAA ) PHARMACIA CORP.  
XX PI Kane CD;  
XX DR WPI; 2004-347928/32.  
XX XX

New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g., diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.

Claim 4; SEQ ID NO 1955; 150pp; English.

The invention relates to an antisense compound 8-30 nucleobases in length

CC	targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
CC	where the antisense compound specifically hybridizes with and inhibits
CC	the expression of FXR. The composition and methods are useful for
CC	inhibiting the expression of FXR (Farnesoid X receptor) in cells or
CC	tissues, or for treating diseases or conditions associated with FXR, such
CC	as diabetes, immunological disorders, cardiovascular disorders, e.g.,
CC	dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
CC	lipoprotein), elevated LDL (low density lipoprotein) or obesity,
CC	hypercholesterolemia, gallstones, hypertriglyceridemia, or neurologic
CC	neurological disorders, or ischemia/reperfusion injury. In addition, the
CC	composition is used for diagnostics, prophylaxis, or as research reagent
CC	or kits. This sequence corresponds to an antisense oligonucleotide of the
CC	invention.
XX	
XX	
SQ	Sequence 20 BP; 11 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
Query Match	0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity	94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative	0; Mismatches 1; Indels 0; Gaps 0
QY	3415 TTGAGAACAGAAATT 3431
Db	2 TTGAGAAAAGAAATT 18
RESULT 2624	
ID	ADN01780/c
XX	ADN01780 standard; DNA; 20 BP.
AC	
XX	ADN01780;
DT	
XX	29-JUL-2004 (first entry)
DE	
XX	Human HIP1 antisense oligonucleotide ISIS251585.
KM	Human; antisense; ss; Huntingtin interacting protein 1; HIP1;
XX	cellular apoptosis; Huntington's disease; Chromosome 7q11.23.
OS	Homo sapiens.
FH	
FT	Key Location/Qualifiers
FT	modified_base 1..20
FT	/tag= b
FT	/mod_base= OTHER
FT	/note= "Phosphorothioate linkages and all cytidines are 5'
FT	-methylcytidines"
FT	modified_base 1..5
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "2'-methoxyethyl residues"
FT	modified_base 16..20
FT	/tag= c
FT	/mod_base= OTHER
FT	/note= "2'-methoxyethyl residues"
XX	
PN	US2004032465-A1.
XX	
PD	13-MAY-2004.
XX	
PP	11-NOV-2002; 2002US-00293864.
XX	
PR	11-NOV-2002; 2002US-00293864.
PA	(ISIS-) ISIS PHARM INC.
PI	
PI	Doble KW;
XX	
DR	WPI; 2004-374983/35.
XX	
PT	New compound that modulates huntingtin interacting protein 1 expression,
PT	useful in treating an animal having a disease or condition involving
PT	dysregulation of cellular apoptosis.

PS	Example15; SEQ ID NO 18; 85bp; English.
XX	
CC	The invention relates to a compound targeted to a nucleic acid molecule
CC	encoding huntingtin interacting protein 1, HIP1. The compound, 8-80
CC	nucleobases in length, is an antisense oligonucleotide, where the
CC	compound specifically hybridises with the nucleic acid molecule encoding
CC	huntingtin interacting protein 1 comprising a sequence appearing as
CC	ADN01766 and inhibits the expression of huntingtin interacting protein 1.
CC	Also included are inhibiting the expression of huntingtin interacting
CC	protein 1 in cells or tissues, screening for a modulator of huntingtin
CC	interacting protein 1, a diagnostic method for identifying a disease
CC	state, a kit or assay device comprising the compound and treating an
CC	animal having a disease or condition associated with huntingtin
CC	interacting protein 1 compound so that expression of huntingtin
CC	interacting protein 1 is inhibited. The compound and the methods are
CC	useful in treating an animal having a disease or condition involving
CC	dysregulation of cellular apoptosis e.g. Huntington's disease. The HIP1
CC	gene is located on chromosome 7q11.23. The present sequence is an
CC	antisense oligonucleotide of the invention.
SQ	
XX	Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
QY	
Db	
	Query Match 0.1%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 1.e+03; Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0.  2363 ACATGAGCAGGATATGG 2379       20 ACATGAGCAGGATGTGG 4
RESULT 2625	
ID	ADN01858
XX	ADN01858 standard; cDNA; 20 BP.
AC	
XX	ADN01858;
DT	
XX	29-JUL-2004 (first entry)
DE	
XX	Human HIP1 antisense target sequence ISIS168101.
KM	
XX	Human; antisense; ss; Huntingtin interacting protein 1; HIP1;
OS	
XX	cellular apoptosis; Huntington's disease; Chromosome 7q11.23.
XX	Homo sapiens.
PN	
XX	US2004092465-A1.
PD	
XX	13-MAY-2004.
Pf	
XX	11-NOV-2002; 2002US-00293864.
PR	
XX	11-NOV-2002; 2002US-00293864.
PA	
XX	(ISIS-) ISIS PHARM INC.
PI	
XX	Dobie KM;
DR	
XX	WPI; 2004-374983/35.
PT	
XX	New compound that modulates huntingtin interacting protein 1 expression,
PT	useful in treating an animal having a disease or condition involving
XX	dysregulation of cellular apoptosis.
BS	
XX	Example 15; SEQ ID NO 96; 85bp; English.
CC	
CC	The invention relates to a compound targeted to a nucleic acid molecule
CC	encoding huntingtin interacting protein 1, HIP1. The compound, 8-80
CC	nucleobases in length, is an antisense oligonucleotide, where the
CC	compound specifically hybridises with the nucleic acid molecule encoding
CC	huntingtin interacting protein 1 comprising a sequence appearing as
CC	ADN01766 and inhibits the expression of huntingtin interacting protein 1.
CC	Also included are inhibiting the expression of huntingtin interacting
CC	protein 1 in cells or tissues, screening for a modulator of huntingtin
CC	interacting protein 1, a diagnostic method for identifying a disease
CC	state, a kit or assay device comprising the compound and treating an
CC	animal having a disease or condition associated with huntingtin
CC	interacting protein 1 compound so that expression of huntingtin
CC	interacting protein 1 is inhibited. The compound and the methods are
CC	useful in treating an animal having a disease or condition involving
CC	dysregulation of cellular apoptosis e.g. Huntington's disease. The HIP1
CC	gene is located on chromosome 7q11.23. The present sequence is an
CC	antisense oligonucleotide of the invention.

CC	protein in cells or tissues, screening for a modulator of huntingtin
CC	interacting protein 1, a diagnostic method for identifying a disease
CC	state, a kit or assay device comprising the compound and treating an
CC	animal having a disease or condition associated with huntingtin
CC	interacting protein 1 compound so that expression of huntingtin
CC	interacting protein 1 is inhibited. The compound or condition involving
CC	useful in treating an animal having a disease or condition involving
CC	dysregulation of cellular apoptosis e.g. Huntington's disease. The HttP1
CC	gene is located on chromosome 7q11.23. The present sequence is an
CC	antisense target region from the HttP1 cDNA.
XX	
SQ	Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
QY	Query Match                 0.1%; Score 15.4; DB 1; Length 20;
	Best Local Similarity   94.1%; Pred. No. 1.8e+03;
	Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;
DB	2363 ACATGACGAGCATGTGG 2379           1 ACATGACGAGCATGTGG 17
RESULT 2626	
ADN49559/C	
ID	ADN49559 standard; DNA; 20 BP.
XX	
AC	ADN49559;
XX	
DT	12-AUG-2004 (first entry)
XX	
DE	Human TDP-1 antisense oligonucleotide ISIS 133418.
XX	
KW	ss; human; antisense; tyrosyl-DNA phosphodiesterase-1; TDP-1;
KM	hyperproliferative disorder.
XX	
OS	Homo sapiens.
XX	
NC	Synthetic.
XX	
PN	US2004097450-A1.
XX	
PD	20-MAY-2004.
XX	
FP	19-NOV-2002; 2002US-00300399.
XX	
PR	19-NOV-2002; 2002US-00300399.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Watt AT;
DR	
XX	
WI	2004-389191/36.
XX	
PT	New compounds, particularly oligonucleotides targeted to a nucleic acid
PT	encoding tyrosyl-DNA phosphodiesterase-1 (TDP-1), useful for treating
PT	diseases associated with TDP-1, e.g. hyperproliferative disorders.
XX	
PS	Example 15; SEQ ID NO 46; 51pp; English.
XX	
CC	The invention relates to a compound targeted to and which specifically
CC	hybridises with a nucleic acid molecule encoding tyrosyl-DNA
CC	phosphodiesterase-1 (TDP-1), and inhibits the expression of TDP-1. The
CC	compound, composition and methods are useful for treating a disease or
CC	condition associated with TDP-1, such as a hyperproliferative disorder.
CC	They are also useful in research and diagnostics for modulating the
CC	expression of TDP-1. The present sequence represents a human TDP-1
CC	antisense oligonucleotide.
XX	
SQ	Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
QY	Query Match                 0.1%; Score 15.4; DB 1; Length 20;
	Best Local Similarity   94.1%; Pred. No. 1.8e+03;
	Matches   16; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

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OY      2132 TAAAGAAAGCATGCTGA 2148
      |||||
      17 TAAAGAGAGCATGCTGA 1
      |||||

RESULT 2627
ADN49634
ID      ADN49634 standard; DNA; 20 BP.
XX
XX      ADN49634;
AC
XX      12-AUG-2004 (first entry)
DT
XX      Human TDP-1 target sequence ISIS 44355.
DE
XX      ss; human; tyrosyl-DNA phosphodiesterase-1; TDP-1;
KM      hyperproliferative disorder.
XX
XX      Homo sapiens.
OS
XX      US2004097450-A1.
PN
XX      20-MAY-2004.
PD
XX      19-NOV-2002; 2002US-00300399.
PF
XX      19-NOV-2002; 2002US-00300399.
PR
XX      (ISIS-) ISIS PHARM INC.
PA
XX      Walt AT;
PI
XX      WPI; 2004-389191/36.
DR
XX
XX      New compounds, particularly oligonucleotides targeted to a nucleic acid
PT      encoding tyrosyl-DNA phosphodiesterase-1 (TDP-1), useful for treating
PT      diseases associated with TDP-1, e.g. hyperproliferative disorders.
XX
XX      Example 15; SEQ ID NO 121; 51bp; English.
XX
XX      The invention relates to a compound targeted to and which specifically
CC      hybridises with a nucleic acid molecule encoding tyrosyl-DNA
CC      phosphodiesterase-1 (TDP-1), and inhibits the expression of TDP-1. The
CC      compound, composition and methods are useful for treating a disease or
CC      condition associated with TDP-1, such as a hyperproliferative disorder.
CC      They are also useful in research and diagnostics for modulating the
CC      expression of TDP-1. The present sequence represents a human TDP-1 target
CC      sequence.
XX
XX      Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
SQ
XX

Query Match      0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      2132 TAAAGAAAGCATGCTGA 2148
      |||||
      4 TAAAGAGAGCATGCTGA 20
      |||||

RESULT 2628
ADR70786
ID      ADR70786 standard; DNA; 20 BP.
XX
XX      ADR70786;
AC
XX      02-DEC-2004 (first entry)
DT
XX      Human cystic fibrosis gene exon 10 fragment PCR primer #1.
DE
XX      Human; cystic fibrosis gene; PCR; ss;
KM      nucleobase-containing sequence assay; canonical interaction;
KW      antiparallel Watson-Crick duplex; primer.
PT

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XX      Homo sapiens.
OS
XX      US2004180345-A1.
PN
XX      16-SEP-2004.
PD
XX      14-MAR-2003; 2003US-00389033.
PF
XX      14-MAR-2003; 2003US-00389033.
PR
XX      (INGE-) INGENEUS CORP.
PA
XX      Erikson GH, Daksis JJ;
PI
XX      WPI; 2004-675598/66.
DR
XX
XX      Assay of a target comprises incubation of a hybridization mixture
PT      comprising a target composition and a probe composition, and detecting a
PT      signal correlated with the binding affinity of the probe.
XX
XX      Example 1; SEQ ID NO 2; 24pp; English.
XX
XX      The invention relates to a method for assaying a target comprising
CC      providing a target composition, a probe composition and a hybridisation
CC      mixture, incubating the hybridisation mixture to bind the target sequence
CC      to the probe sequence to provide a complex, and detecting a signal
CC      correlated with a binding affinity of the probe for the target. The assay
CC      is useful for enhancing the sensitivity of any method for assaying
CC      interactions between nucleobase-containing sequences (canonical
CC      interactions between nucleobase-containing probes and targets to form
CC      antiparallel Watson-Crick duplexes). This sequence represents a PCR
CC      primer used to amplify a region of exon 10 of the human cystic fibrosis
CC      gene, used in the scope of the invention.
XX
XX      Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
SQ
XX

Query Match      0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      3770 CAGAGGCCCTGAACAG 3786
      |||||
      2 CAGAGTACCTGAACAG 18
      |||||

RESULT 2629
ADP68938
ID      ADP68938 standard; DNA; 20 BP.
XX
XX      ADP68938;
AC
XX      09-SEP-2004 (first entry)
DT
XX      Human DRAK2 antisense oligonucleotide ISIS224183.
DE
XX
XX      Human; ss; antisense; DRAK2;
KM      death-associated protein kinase-rel. apoptosis-inducing protein kinase;
KW      serine/threonine kinase 17B; STK17B; apoptosis; degenerative disorder;
KW      neurological disorder; Alzheimer's disease; Parkinson's disease;
KW      Amyotrophic lateral sclerosis; ALS; retinitis pigmentosa;
KW      blood cell disorder; cancer; autoimmune disorder; viral infection;
KW      gene therapy; hyperproliferative disorder; chromosome 2.
XX
XX      Homo sapiens.
OS
XX      Key
FH      Location/Qualifiers
FT      modified_base 1..20
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate backbone and all cytidines are 5
FT      -methylcytidines"
FT      modified_base 1..5

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FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl residue"
FT      16. 20
FT      modified_base
FT      /*tag= C
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl residue"
PN      US2004115645-A1.
PD      17-JUN-2004.
PF      12-DEC-2002; 2002US-00318819.
PR      12-DEC-2002; 2002US-00318819.
PA      (ISIS-) ISIS PHARM INC.
PI      Bennett CF, Dobie KM;
PS      WPI; 2004-449384/42.
XX      New oligonucleotide compound that inhibits expression of DRAK2, useful
XX      for preparing a composition for treating hyperproliferative disorder,
XX      e.g., cancer.
XX      Example 15; SEQ ID NO 84; 87pp; English.
XX      The invention relates to a new compound (e.g. an antisense
XX      oligonucleotide), having a sequence comprising 8-80 bp targeted to a
XX      nucleic acid encoding DRAK2 (death-associated protein kinase-related
XX      apoptosis-inducing protein kinase 2, also known as serine/threonine
XX      kinase 17B, STK17B), specifically hybridises with the nucleic acid
XX      encoding DRAK2 (appearing as ADE8859 and representing bases 58695-149492
XX      of human chromosome 2) and inhibits expression of DRAK2. Also included
XX      are inhibiting the expression of DRAK2 in cells or tissues, screening for
XX      a modulator of DRAK2, a diagnostic method for identifying a disease
XX      state, a kit or assay device comprising the compound and treating an
XX      animal having a disease or condition associated with DRAK2. The
XX      oligonucleotide compound is useful for preparing a composition for
XX      treating hyperproliferative disorders, degenerative disorders,
XX      neurological disorders, Alzheimer's disease, Parkinson's disease,
XX      Amyotrophic lateral sclerosis (ALS), retinitis pigmentosa, blood cell
XX      disorders, cancer, autoimmune disorders and viral infection. The present
XX      sequence represents an antisense oligonucleotide targeting DRAK2.
SQ      Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
XX
Query Match      0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY      5298 AAAAACAATTTCACTTCAA 5317
DB      1 AAAGACATTTTCACTGTAA 20
XX
RESULT 2630
AAQ32847/c
ID      AAQ32847 standard; DNA; 20 BP.
XX
AC      AAQ32847;
XX
DT      25-MAR-2003 (revised)
XX
DT      25-JAN-1993 (first entry)
XX
DE      Probe for the fla gene of Borrelia burgdorferi.
XX
KM      Flagella-less; vaccine; immunoassay; Lyme disease; epidemic bovine;
XX      abortion; avian spirochetosis; relapsing fever; flagellin; ss.
XX
OS      Synthetic.
XX

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PN      WO9212235-A1.
XX      23-JUL-1992.
XX      10-JAN-1992; 92WO-US000181.
XX      11-JAN-1991; 91US-00641143.
XX      (TEXA ) UNIV TEXAS.
XX      Barbour AG, Bunnoc V;
XX      WPI; 1992-268660/32.
XX      New flagella-less Borrelia and derived antigens - useful for vaccinating
XX      against and diagnosing Borrelia infections e.g. Lyme disease or relapsing
XX      fever.
XX      Disclosure; Page 14; 88pp; English.
XX      The sequence shows a synthetic probe having a sequence based on a
XX      conserved sequence of Borrelia burgdorferi flagellin gene (fla gene) of
XX      two other strains of B. burgdorferi. The probe was used to screen a
XX      genomic library of strain HB19 of B. burgdorferi in lambda FIX II to
XX      obtain the DNA sequence encoding the flagellar protein of B. burgdorferi.
XX      The fla gene may be mutagenised to form an inactive fla gene e.g. by
XX      deletion of the entire coding region, or mutagenesis of the RBS, etc. so
XX      that functional flagellar protein is not produced. This mutated gene may
XX      be reintroduced into Borrelia species and cultures of flagellless
XX      Borrelia microbes produced. Antigens to the flagellless Borrelia sp. and
XX      vaccines can be used for thr prevention and treatment of Lyme disease,
XX      epidemic bovine abortion, avian spirochetosis or relapsing fever. Since
XX      the transformed microorganism lacks the flagella antigen associated with
XX      autoantibody, it can be used to immunise individuals against Lyme disease
XX      without the risk of vaccine induced autoantibody formation. See also
XX      AAQ27078. (Updated on 25-MAR-2003 to correct PN field.)
SQ      Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
XX
Query Match      0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY      177 CTGCTGCTGCTGCTGCTGCGC 196
DB      20 CTTCTGATGAGCTGCTGCGC 1
XX
RESULT 2631
AAQ51069/c
ID      AAQ51069 standard; DNA; 20 BP.
XX
AC      AAQ51069;
XX
DT      25-MAR-2003 (revised)
XX
DT      11-MAY-1994 (first entry)
XX
DE      Human glucokinase exon 5 PCR-SSCP analysis downstream primer.
XX
KM      Human; glucokinase; short arm; chromosome 7; MODY; insulin secretion;
XX      non-insulin dependant diabetes mellitus; NIDDM; glucose-6-phosphate;
XX      maturity-onset diabetes of the young; glucose; regulation; mutation;
XX      detection; primer; amplify; single-strand conformational polymorphism;
XX      adenosine deaminase; ADA; GLUT2; beta-cell glucose transporter;
XX      restriction fragment length polymorphism; polymerase chain reaction;
XX      RFLP; SSCP; exon; PCR; ss.
XX
OS      Synthetic.
XX
KM      W09321343-A1.
XX      28-OCT-1993.
XX

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PF 14-APR-1993; 93WO-US003560.
XX
XX 22-APR-1992; 92US-00872678.
XX
XX (ARCH-) ARCH DEV CORP.
XX
XX Bell GI, Stoffel M, Takeda J, Vionnet N, Yasuda K, Pillels SJ;
XX Zouali H, Velho G, Cohen D, Froguel P;
XX WPI, 1993-351752/44.
XX
XX Detection of early onset, non-insulin dependent diabetes mellitus - by
XX detecting a mutation in a glucokinase gene or prod., esp. for maturity
XX onset diabetes of the young.
XX
XX Example 7; Page 31; 60pp; English.
XX
XX The sequences given in AAQ51045-79 are primers which were used in the
XX detection of restriction fragment length polymorphisms (RFLPs) within the
XX human adenosine deaminase gene (ADA), beta-cell glucose transporter gene
XX (GLUT2) and the human glucokinase gene. The glucokinase gene maps to a
XX locus on the short arm of chromosome 7 and mutations within this gene
XX show some correlation with certain forms of non-insulin dependant
XX diabetes mellitus (NIDDM), esp. maturity-onset diabetes of the young
XX (MODY). The polymorphic AluVPA region of ADA cosegregates with one gene
XX responsible for MODY and has been mapped to the long arm of chromosome
XX 20. Glucokinase is an enzyme which catalyses the formation of glucose-6-
XX phosphate from glucose and may be involved in the regulation of insulin
XX secretion and integration of hepatic intermediary metabolism. Nonsense
XX and missense mutations within the glucokinase gene (see also AAQ51038-44)
XX may be identified by the method of the invention. Early onset NIDDM is
XX examined by detecting at least one single nucleotide change in a portion
XX of the gene. The DNA is isolated and a pair of primers are selected which
XX are capable of amplifying an exon of the gene via PCR. The single
XX nucleotide changes are identified in the amplification product. (Updated
XX on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 921 CACCTCTTCGCTTCTC 940
XX |||||
XX Db 20 CAGCAGCTGCTGCTTCTC 1
XX
XX RESULT 2632
XX AAQ77805
XX ID AAQ77805 standard; DNA; 20 BP.
XX
XX AAQ77805;
XX
XX 25-MAR-2003 (revised)
XX DT 08-DEC-1994 (first entry)
XX
XX Meg-Pot primer 7D-1S.
XX
XX Megakaryocyte potentiator; Meg-Pot; thrombocytopenia; platelet;
XX amplification; primer; polymerase chain reaction; PCR; ss.
XX
XX Synthetic.
XX
XX W09410312-A1.
XX
XX 11-MAY-1994.
XX
XX 25-OCT-1993; 93WO-JP001540.
XX
XX 23-OCT-1992; 92JP-00286153.
XX PR 11-NOV-1992; 92JP-00301387.
XX PR 09-DEC-1992; 92JP-00329546.

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XX
XX (CHUS ) CHUGAI SEIYAKU KK.
XX
XX Yamaguchi N, Kojima T, Oh-Eda M, Hattori K;
XX WPI; 1994-167467/20.
XX
XX New mega:karyocyte potentiator - for potential treatment of
XX thrombocytopenia.
XX
XX Disclosure; Page 17; 74pp; Japanese.
XX
XX Use of the primers given in AAQ77805-08 in PCR resulted in the fragments
XX given in AAQ63969-70. DNA encoding Meg-Pot has potential use in treatment
XX of thrombocytopenia and low platelet function. (Updated on 25-MAR-2003 to
XX correct PN field.)
XX
XX Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1389 CCTCAGCAGCAGCAGCTGCG 1408
XX |||||
XX Db 1 CTCCTCAACAGCAGCAGCTGCG 20
XX
XX RESULT 2633
XX AAT10415
XX ID AAT10415 standard; cDNA; 20 BP.
XX
XX AAT10415;
XX
XX 19-APR-1996 (first entry)
XX
XX Human FK506 binding protein gene amplification primer FK-3.
XX
XX FK506 binding protein; human; homology; PPIase; autoimmune disease; SLB;
XX rheumatism; systemic lupus erythematosus; PCR; primer; amplification; ss.
XX
XX Synthetic.
XX
XX W09524480-A1.
XX
XX 14-SEP-1995.
XX
XX 09-MAR-1995; 95WO-JP000393.
XX
XX 10-MAR-1994; 94JP-00067967.
XX
XX (SAKA ) OTSUKA PHARM CO LTD.
XX PA (KIMS/) KIM S.
XX PA (SHIN/) SHIN K.
XX PA (SHIN/) SHIN J.
XX
XX Shin S, Fujiwara T, Okuno S, Hirano H;
XX WPI; 1995-336738/43.
XX
XX FK506 binding protein gene and protein - for developing and screening
XX remedies for autoimmune diseases, e.g. rheumatism and SLB.
XX
XX Example 1; Page 21; 41pp; Japanese.
XX
XX Primers AAT10413-5 were used to amplify the nucleotide sequence of the
XX FK506 binding protein gene, designated OTK4, which encodes a PPIase
XX protein of 108 amino acids. The gene was isolated from a human foetal
XX cDNA library. The gene has high homology to the 12 kD human FK506 binding
XX protein. The gene can be used to produce large amounts of the FK506
XX protein which contains a PPIase activity. The protein is useful in the
XX development of remedies for autoimmune diseases e.g. rheumatism and
XX systemic lupus erythematosus

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XX SLit-like protein; human; diagnosis; treatment; brain-specific disease;
KW cancer; antibody; ss.
XX
XX Synthetic.
XX
XX JP10087699-A.
XX
XX 07-APR-1998.
XX
XX 15-JUL-1997; 97JP-00205351.
XX
XX 16-JUL-1996; 96JP-00186219.
XX
XX (ASAH ) ASAH KASEI KOGYO KK.
XX
XX WPI; 1998-267127/24.
XX
XX Human SLit-like protein - useful for diagnosis and treatment of brain-
XX specific diseases and cancers.
XX
XX Disclousure; Page 38; 45pp; Japanese.
XX
XX The present sequence appears in the specification. The specification
XX describes a novel human slit-like protein (the mature protein is claimed
XX in Claim 1). The slit-like polypeptide is useful for diagnosis and
XX treatment of brain-specific diseases and cancers. Antibodies directed
XX against the protein, or its fragments can also be used for diagnosing
XX cancer
XX
XX Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1396 CACAGCAGCTCGAGAGATC 1415
Db 20 CACAGCAGCAGCAGCAGCTC 1
RESULT 2637
AAZ00607/C
ID AAZ00607 standard; DNA; 20 BP.
XX
XX AAZ00607;
XX
XX 06-OCT-1999 (first entry)
XX
XX Human GPC4 exon 9 deletion analysis primer A.
XX
XX Glypican; GPC1; GPC3; GPC4; GPC5; GPC6; human; glypican-related protein;
KW glypican-6; glypican-4; glypican-1; glypican-3; glypican-5; diagnosis;
KW treatment; abnormal; cell growth; cell behaviour; somatic overgrowth;
KW tumour formation; primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO937764-A2.
XX
XX 29-JUL-1999.
XX
XX 20-JAN-1999; 99WO-EP000329.
XX
XX 27-JAN-1998; 98EP-00200226.
XX
XX (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
XX Veugelers MPD, David GJF;
XX
XX WPI; 1999-469128/39.
XX

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PT New polynucleotides encoding glypican-related proteins, used to diagnose,
XX e.g. tumor formation.
XX
XX Example 2; Page 35; 79pp; English.
XX
XX This invention describes the isolation of novel human polynucleotides
XX encoding glypican-related proteins, glypican-6 (GPC6) and glypican-4
XX (GPC4). The invention also describes the polynucleotide and encoded
XX protein sequences of glypican-1 (GPC1), glypican-3 (GPC3) and glypican-5
XX (GPC5). The products of the invention can be used to diagnose and treat
XX disorders and diseases, particularly those involving abnormal cell growth
XX and behaviour, such as somatic overgrowth and tumour formation. AAZ00587-
XX 200608 represent GPC4 deletion analysis primers used in the method of the
XX invention
XX
XX Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 798 CCACTTGTCTCATCAAG 817
Db 20 CCACTTGTCTCATCAAG 1
RESULT 2638
AAZ00645/C
ID AAZ00645 standard; DNA; 20 BP.
XX
XX AAZ00645;
XX
XX 06-OCT-1999 (first entry)
XX
XX Human GPC4 exon 9A SCA primer A.
XX
XX Glypican; GPC1; GPC3; GPC4; GPC5; GPC6; human; glypican-related protein;
KW glypican-6; glypican-4; glypican-1; glypican-3; glypican-5; diagnosis;
KW treatment; abnormal; cell growth; cell behaviour; somatic overgrowth;
KW tumour formation; SCA; single strand conformation polymorphism; primer;
KW ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO937764-A2.
XX
XX 29-JUL-1999.
XX
XX 20-JAN-1999; 99WO-EP000329.
XX
XX 27-JAN-1998; 98EP-00200226.
XX
XX (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
XX Veugelers MPD, David GJF;
XX
XX WPI; 1999-469128/39.
XX
XX New polynucleotides encoding glypican-related proteins, used to diagnose,
XX e.g. tumor formation.
XX
XX Example 3; Page 37; 79pp; English.
XX
XX This invention describes the isolation of novel human polynucleotides
XX encoding glypican-related proteins, glypican-6 (GPC6) and glypican-4
XX (GPC4). The invention also describes the polynucleotide and encoded
XX protein sequences of glypican-1 (GPC1), glypican-3 (GPC3) and glypican-5
XX (GPC5). The products of the invention can be used to diagnose and treat
XX disorders and diseases, particularly those involving abnormal cell growth
XX and behaviour, such as somatic overgrowth and tumour formation. AAZ00627-
XX 200648 represent GPC4 SCA primers (single strand conformation
XX polymorphism) used in the method of the invention

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XX SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
Query Match
  0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 798 CCACTGCTCTCATCAAGG 817
   ||||| ||||| ||||| |||||
Db 20 CCACTGTCTCATCAGAG 1

RESULT 2639
AA15765/c
ID AA15765 standard; cDNA to mRNA; 20 BP.
XX AC AA15765;
XX DT 07-MAY-1999 (first entry)
XX DE Antisense oligonucleotide targeted to upstream sequence of VEGF.
XX KM Vascular endothelial cell growth factor; VEGF; antisense oligonucleotide;
XX KM solid tumor growth; anticancer agent; rheumatic arthritis;
XX KM diabetic retinitis; ss.
XX OS Synthetic.
XX PN JP11042091-A.
XX PD 16-FEB-1999.
XX PF 25-JUL-1997; 97JP-00213838.
XX PR 25-JUL-1997; 97JP-00213838.
XX PA (TOAG ) TOA GOSHI CHEM IND LTD.
XX DR WPI; 1999-197823/17.
XX PT An antisense nucleic acid compound against vascular endothelial cell
XX PT growth factor (VEGF) - useful as an anticancer agent, and for treatment
XX PT of rheumatic arthritis and diabetic retinitis.
XX PS Example 1; Page 7; 16pp; English.
XX CC AA15764-81 represent antisense oligonucleotides targeted to the upstream
XX CC sequence of the coding region for vascular endothelial cell growth factor
XX CC (VEGF). Antisense oligonucleotides targeted to this region inhibit at
XX CC least 50 % of VEGF expression by the cell. The antisense oligonucleotides
XX CC can inhibit the growth of solid tumor and are useful as anticancer agents
XX CC and for treating rheumatic arthritis and diabetic retinitis
XX SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
Query Match
  0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 3187 ATGAGCTCCAGAGAGAGAC 3206
   ||||| ||||| ||||| |||||
Db 20 AAGAGCTCCAGAGAGAGATC 1

RESULT 2640
AA15600
ID AA15600 standard; cDNA to mRNA; 20 BP.
XX AC AA15600;
XX DT 07-MAY-1999 (first entry)
XX PT Fragment of upstream sequence of coding region for VEGF.

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XX KM Vascular endothelial cell growth factor; VEGF; antisense oligonucleotide;
XX KM solid tumor growth; anticancer agent; rheumatic arthritis;
XX KM diabetic retinitis; ss.
XX OS Unidentified.
XX PN JP11042091-A.
XX PD 16-FEB-1999.
XX PF 25-JUL-1997; 97JP-00213838.
XX PR 25-JUL-1997; 97JP-00213838.
XX PA (TOAG ) TOA GOSHI CHEM IND LTD.
XX DR WPI; 1999-197823/17.
XX DE An antisense nucleic acid compound against vascular endothelial cell
XX DE growth factor (VEGF) - useful as an anticancer agent, and for treatment
XX DE of rheumatic arthritis and diabetic retinitis.
XX PS Example 2; Page 11; 16pp; English.
XX CC The present sequence represents the a fragment of the upstream sequence
XX CC of the coding region for vascular endothelial cell growth factor (VEGF).
XX CC Antisense oligonucleotides targeted to this region inhibit at least 50 %
XX CC of VEGF expression by the cell. The antisense oligonucleotides can
XX CC inhibit the growth of solid tumor and are useful as anticancer agents and
XX CC for treating rheumatic arthritis and diabetic retinitis
XX SQ Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
Query Match
  0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 3187 ATGAGCTCCAGAGAGAGAC 3206
   ||||| ||||| ||||| |||||
Db 1 AAGAGCTCCAGAGAGAGATC 20

RESULT 2641
AA221358
ID AA221358 standard; DNA; 20 BP.
XX AC AA221358;
XX DT 02-DEC-1999 (first entry)
XX DE Recombinant HIV-1 plasmid pNL4-3 construction primer #7.
XX KM Human immunodeficiency virus type 1; HIV-1; viral; plasmid;
XX KM molecular clone; recombinant; drug resistance; primer; ss.
XX OS Synthetic.
XX OS Human immunodeficiency virus 1.
XX PN JP11239486-A.
XX PD 07-SEP-1999.
XX PF 07-OCT-1998; 98JP-00300376.
XX PR 07-OCT-1997; 97US-00946021.
XX PA (NIHA ) JAPAN ENERGY CORP.
XX DR WPI; 1999-554022/47.
XX PT Recombinant human immunodeficiency type 1 virus - useful for assessment
XX PT of drug resistance.

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XX PS Disclosure; Page 16; 30pp; Japanese.
XX CC
XX CC The present invention describes a recombinant human immunodeficiency type
XX CC 1 virus (HIV-1) having a variation in the predetermined base in the
XX CC region encoding for viral protease in comparison to HIV genome gene
XX CC cloned in HIV-1 molecular clone pNL4-3, and having a (+) chain RNA genome
XX CC with modifications of A at 2591st gene of the HIV genome into C, and A at
XX CC 2594th into G, and a modified amino acid sequence corresponding to
XX CC modified base in the region encoding for the virus derived protease, and
XX CC optionally having a recombinant HIV-1 molecular clone with a plasmid
XX CC composed of the same base sequence with that of the molecular clone pNL4-
XX CC 3 in the residual base sequence. Also described are: (1) the plasmid of
XX CC pNL-Sma2 and pNL-delta-Pro2. The recombinant HIV-1 molecular clones can
XX CC be used for reliable assessment of drug resistance with the recombinant
XX CC HIV-1. AA221352 to AA221392 represent primers used in the exemplification
XX CC of the present invention
XX SQ
XX Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 4579 TCAAGATTGATGGCGAGTTC 4598
XX | | | | | | | | | |
XX 1 TCAAGATTCTCGGAGAGTTC 20
XX
XX RESULT 2642
XX AA206131
XX ID AA206131 standard; DNA; 20 BP.
XX AC AA206131;
XX DT 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX paratrachoma; inclusion conjunctivitis; genital disease; peritropatitis;
XX nongonococcal urethritis; epididymitis; salpingitis; PCR primer;
XX bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX
XX MO9928475-A2.
XX PN 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX PF
XX 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1827; 1755pp; English.
XX
XX PCR primers AA201426-206209 were used to amplify open reading frames
XX CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
XX CC encode polypeptides (see AA36754-Y37949) which can be used as vaccines
XX CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX CC be used to control growth of the microorganism. Chlamydia trachomatis is
XX CC responsible for a large number of diseases, e.g. eye diseases such as
XX CC conjunctivitis, genital diseases such as nongonococcal urethritis,
XX CC epididymitis, cervicitis, salpingitis, peritropatitis, bartholinitis,
XX CC pneumonia, and venereal lymphogranulomatosis.
XX CC The polypeptides of the invention may be of use in treating these
XX CC diseases
XX SQ
XX Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 486 GAGAGCTTCTGACGCCAT 505
XX | | | | | | | | | |
XX 1 GAAGAGCTTGTATGACGCCAT 20
XX
XX RESULT 2643
XX AA205464
XX ID AA205464 standard; DNA; 20 BP.
XX AC AA205464;
XX DT 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX paratrachoma; inclusion conjunctivitis; genital disease; peritropatitis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX
XX MO9928475-A2.
XX PN 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX PF
XX 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1772; 1755pp; English.
XX
XX PCR primers AA201426-206209 were used to amplify open reading frames
XX CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
XX CC encode polypeptides (see AA36754-Y37949) which can be used as vaccines
XX CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX CC be used to control growth of the microorganism. Chlamydia trachomatis is
XX CC responsible for a large number of diseases, e.g. eye diseases such as
XX CC conjunctivitis, genital diseases such as nongonococcal urethritis,
XX CC epididymitis, cervicitis, salpingitis, peritropatitis, bartholinitis,
XX CC pneumonia, and venereal lymphogranulomatosis.
XX CC The polypeptides of the invention may be of use in treating these
XX CC diseases
XX SQ
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;

```

Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3906 GAGTCAACTCCAGACAT 3925

Db 1 GGGTTCAACTCCATAGCAT 20

RESULT 2644

AAK89173/C  
ID AAK89173 standard; DNA; 20 BP.

XX AAK89173;

XX 15-SEP-1999 (first entry)

DE Seq ID No: 27 of JP1164690.

KM Vertebrate-derived protein; slit protein; diagnosis; cancer; nerve;

XX muscle; endocrine system; ss.

OS Synthetic.

XX JP1164690-A.

XX 22-JUN-1999.

PF 05-DEC-1997; 97JP-00335435.

XX 05-DEC-1997; 97JP-00335435.

XX (ASAH ) ASAMI KASEI KOYO KK.

XX WPI; 1999-411830/35.

XX New vertebrate slit protein - useful for diagnosis and treatment of

PT cancers in nerves, muscle and endocrine system.

XX Disclosure; Page 89; 102pp; Japanese.

CC The invention relates to a vertebrate-derived protein containing an amino  
CC acid sequence shown in AAY27137 and AAY27139. The vertebrate-derived  
CC protein has at least 55 % homology to one of sequences shown in AAY27141-  
CC Y27144, and has slit protein-like activity. The vertebrate slit proteins  
CC encoding nucleic acid sequences have at least 60% homology to nucleic  
CC acid sequences AAK89161-163. The vertebrate-derived proteins can be  
CC produced recombinantly by transforming host cells with expression vectors  
CC comprising the encoding nucleic acids. The proteins of the invention are  
CC for diagnosing and treating cancer of the nerves, muscle and/or endocrine  
CC system

XX Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1396 CACAGCAGCTGCGAGATC 1415

Db 20 CACAGCAGCAGCAGAGCTC 1

RESULT 2645

AAAS5764  
ID AAAS5764 standard; DNA; 20 BP.

XX AAAS5764;

XX 01-SEP-2000 (first entry)

XX Human DNA methyltransferase antisense oligonucleotide SEQ ID NO:7.

XX Human; DNA methyltransferase; DNA Metase; antisense oligonucleotide;

KM modulation; inhibition; gene expression; combination therapy; p16;  
KM histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;  
KM methylation; gene therapy; tumour; cytostatic; antiasthmatic;  
KM antiinflammatory; inflammation; asthma; ss.

XX Homo sapiens.

XX WO200023112-A1.

XX 27-APR-2000.

PF 19-OCT-1999; 99WO-US024278.

XX 19-OCT-1998; 98US-0104804P.

XX (METH-) METHYLGENE INC.

XX Besterman JM; Macleod AR; Siders WM;

XX WPI; 2000-339532/29.

PT Inhibiting gene expression e.g. DNA methyltransferase, by treating cells  
PT with a synergistic amount of antisense oligonucleotide and protein  
PT effectors e.g. 5-aza-cytidine of gene products, useful for gene therapy  
PT of e.g. tumors.

XX Disclosure; Page 25; 99pp; English.

CC The present invention describes a method for inhibiting the expression of  
CC a gene in a cell comprising contacting the cell with an effective  
CC synergistic amount of an antisense oligonucleotide which inhibits  
CC expression of the gene, and an effective synergistic amount of a protein  
CC effector of a product of the gene. Also described are: (1) a method for  
CC treating a disease responsive to inhibition of a gene in a mammal; (2) a  
CC method for inhibiting tumour growth in mammal; (3) an inhibitor of a gene  
CC comprising an antisense oligonucleotide which inhibits expression of the  
CC gene in operable association with a protein effector of a gene product;  
CC and (4) a pharmaceutical composition comprising the inhibitor of (3). The  
CC methods and compositions are useful as analytical tools for transgenic  
CC studies and as therapeutic tools, e.g. as gene therapy tools for human  
CC diseases including benign and malignant tumours, inflammation or asthma.  
CC The methods, inhibitors and compositions of the invention that inhibit  
CC expression or activity of a gene or gene product may be used to treat  
CC patients having, or predisposed to developing, a disease responsive to  
CC inhibition of the gene. These may also be used to activate silenced genes  
CC to provide missing gene functions and improve a given condition.  
CC Furthermore, the methods and compositions are useful as probes of the  
CC physiological function of a gene product in an experimental cell culture  
CC or animal system; and to evaluate the effect of inhibiting gene activity  
CC or expression. AAAS5758 to AAAS5842 represent oligonucleotide sequences  
CC which are used in the exemplification of the present invention

XX Sequence 20 BP; 3 A; 8 C; 0 G; 9 T; 0 U; 0 Other;

SQ Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1756 TTCTTCTTCGACTTTCCTT 1775

Db 1 TTCTCTTCACACATTCCTT 20

RESULT 2646

AAZ58817  
ID AAZ58817 standard; DNA; 20 BP.

XX AAZ58817;

XX 18-APR-2000 (first entry)

XX B. thuringiensis WNR toxin gene specific primer.

XX

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KW Bacillus thuringiensis; toxin; endotoxin; pesticide; plant pest;
KM lepidoptera; cleopetra; PCR primer; ss.
OS Bacillus thuringiensis.
PN WO9597282-A2.
PD 11-NOV-1999.
XX
XX 06-MAY-1999; 99WO-US009997.
XX
XX 06-MAY-1999; 98US-00073898.
XX
XX (MYCO ) MYCOGEN CORP.
XX
XX Feltelson JS, Schnepf HE, Narva KE, Stockhoff BA, Schmeltz J;
PI Loewer D, Dullum CJ, Muller-Cohn J, Stamp L, Morrill G;
PI Finstad-Lee S;
XX
XX WPI; 2000-096811/08.
XX
XX New polynucleotides encoding pesticidally active proteins, useful for
XX transforming plants for controlling pests.
XX
XX Claim 1; Page 30; 104pp; English.
XX
XX The invention relates to novel B. thuringiensis isolates, and genes
XX encoding pesticidal toxins which are toxic to non-mammalian pests. The
XX genes are useful in the control of non-mammalian pests and especially
XX plant pests (e.g. lepidoptera and/or cleopetra). The polynucleotides
XX are useful for transforming plants for the identification and
XX characterizing of genes which encode pesticidal toxins. Sequences
XX AA558916-817 represent PCR primers specific for B. thuringiensis
XX pesticidal toxin WAR gene
XX
XX Sequence 20 BP; 9 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 4806 TCCCTAAAGTATGGAACATA 4825
Db 1 TCCCTAAAGCATCGAATA 20
RESULT 2647
AAH21731
ID AAH21731 standard; DNA; 20 BP.
XX
XX AAA73791;
XX
XX 14-DEC-2000 (first entry)
XX
XX PCR primer JG2A used to amplify lambda vector from E.coli.
XX
XX Cytotoxic; prodrug; enzyme; PCR primer; lambda; ss.
XX
XX Bacteriophage lambda.
XX
XX WO200043541-A1.
XX
XX 27-JUL-2000.
XX
XX 21-JAN-2000; 2000WO-GB000157.
XX
XX 22-JAN-1999; 99GB-00001471.
XX
XX 22-JAN-1999; 99US-0116924P.
XX
XX (COBR-) COBRA THERAPEUTICS LTD.
XX
XX Searle PF;
PI

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XX
XX WPI; 2000-482917/42.
XX
XX Selecting, from a gene library, a nucleic acid encoding an enzyme that is
XX capable of converting a prodrug to its active cytotoxic drug form.
XX
XX Example 2; Page 17; 36pp; English.
XX
XX The present invention relates to a method of selecting, from a gene
XX library, a nucleic acid encoding an enzyme that is capable of converting
XX a prodrug to its active drug form. The method is useful for selecting
XX enzymes that can convert a prodrug to its active cytotoxic drug form. The
XX present sequence is a PCR primer used to amplify the lambda vector from
XX E.coli. The size of the PCR product indicated which lambda vector had
XX been inserted. The lambda vector was used the method of the invention
XX
XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 1317 TGGCTGAACGTGTGCATGC 1336
Db 1 TGGCGGAAGTATGCATGC 20
RESULT 2648
AAH21731/c
ID AAH21731 standard; DNA; 20 BP.
XX
XX AAH21731;
XX
XX 14-AUG-2001 (first entry)
XX
XX Corynebacterium glutamicum chaperone CpkB related PCR primer SEQ.4.
XX
XX Corynebacterium glutamicum; chaperone; chaperonin; CpkB; groEL;
XX fermentation; L-glutamic acid; thermophilic microbe; PCR primer; ss.
XX
XX Corynebacterium glutamicum.
XX
XX JP2001069979-A.
XX
XX 21-MAR-2001.
XX
XX 31-AUG-1999; 99JP-00245121.
XX
XX 31-AUG-1999; 99JP-00245121.
XX
XX (NISB ) JAPAN TOBACCO INC.
XX
XX (BEAB-) BE ABLE KK.
XX
XX WPI; 2001-321175/34.
XX
XX Preparation of L-glutamic acid by fermentation.
XX
XX Example 1; Page 10; 18pp; Japanese.
XX
XX The present invention describes an L-glutamic acid-producing microbe (I)
XX or its mutant which expresses the molecular chaperone derived from a
XX thermophilic microbe and produces stably L-glutamic acid at a temperature
XX near the upper limit of optimum growth or higher. (I) or its mutant
XX transformed by a recombinant DNA containing a gene encoding the molecular
XX chaperone derived from a thermophilic microbe and a promoter operably
XX associated with a gene (II) comprising: (a) a fully defined 1661 base
XX pair (bp) sequence (AAH21757); (b) a nucleic acid sequence encoding a
XX protein comprising: (i) a base sequence in which 1-20 bases are deleted,
XX replaced or added in AAH21757; or (ii) at least one base is deleted,
XX replaced or added in a fully defined 519 base sequence (AAH21768), and
XX having molecular chaperone activity in (I). Also described is a method
XX for the preparation of L-glutamic acid by fermentation in which the
XX transformed (I) is used and cultured at a high temperature limiting the

```

CC production of L-glutamic acid with the untransformed (1). The microbe can  
CC be used for the preparation of L-glutamic acid. The present sequence  
CC represents a PCR primer used in the preparation of Corynebacterium  
CC glutamicum chaparrone CpkB, which is used in an example from the present  
CC invention

XX SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Mismatches 3; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1772 CCTTGATGATGCTTCGCG 1791

DB 20 CCTTGATGATGCTTCGCG 1

RESULT 2649

AAK95224/c

XX AAK95224 standard; DNA; 20 BP.

XX AC AAK95224;

XX DT 06-NOV-2001 (first entry)

XX DE Human cDNA clone-specific primer, SEQ ID NO: 4469.

XX KM Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.

XX OS Homo sapiens.

XX PN EP1130094-A2.

XX PD 05-SEP-2001.

XX PF 07-JUL-2000; 2000EP-00114089.

XX PR 08-JUL-1999; 99JP-00194486.

XX PR 11-JAN-2000; 2000JP-00118774.

XX PR 02-MAY-2000; 2000JP-00183765.

XX PA (HELI-) HELIX RES INST.

XX PI Oca T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;

XX PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;

XX DR WPI; 2001-524255/58.

XX PT 830 Primers useful for synthesizing full length cDNA clones and their use

XX PT in genetic manipulation.

XX PS Example 18; Page 134; 1380pp + Sequence Listing; English.

XX XX The invention relates to primers for synthesizing full length cDNA

XX CC clones. 830 cDNA molecules encoding a human protein have been isolated

XX CC and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have

XX CC been determined. Primers for synthesizing the full length cDNA are useful

XX CC for clarifying the function of the protein encoded by the cDNA. The full

XX CC length clones were obtained by construction of full length enriched cDNA

XX CC libraries that were synthesized by the oligo-capping method. The primers

XX CC enable the production of the full length cDNA easily without any special

XX CC methods. The present sequence is a primer used to amplify a human cDNA

XX CC clone provided in the invention

XX SQ Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Mismatches 3; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2700 GCCAAGGCTGAGTAATAACT 2719

DB 20 GCCAATGCTGTATAAAACT 1

RESULT 2650

AAAD11514/c

XX AAD11514 standard; DNA; 20 BP.

XX AC AAD11514;

XX DT 24-SEP-2001 (first entry)

XX DE Human glycogen synthase kinase 3-beta antisense oligo ISIS 117443.

XX KM Antisense; glycogen synthase kinase 3-beta; GSK3B; diabetes; infection;

XX KM insulin regulation disorder; neurological disorder; Alzheimer's disease;

XX KM bipolar illness; inflammation; tumour; phosphorothioate; TPK-1;

XX KM tau protein kinase I; human; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FH Key

XX FT modified\_base

XX FT 1..20

XX FT /tag= a

XX FT /mod\_base= OTHER

XX FT /note= "Phosphorothioate backbone"

XX FT 1..5

XX FT /tag= b

XX FT /mod\_base= OTHER

XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX FT 3

XX FT /tag= d

XX FT /mod\_base= m5c

XX FT modified\_base

XX FT 7

XX FT /tag= e

XX FT /mod\_base= m5c

XX FT modified\_base

XX FT 9

XX FT /tag= f

XX FT /mod\_base= m5c

XX FT modified\_base

XX FT 15

XX FT /tag= g

XX FT /mod\_base= m5c

XX FT modified\_base

XX FT 16..20

XX FT /tag= c

XX FT /mod\_base= OTHER

XX FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX FT WO200152862-A1.

XX PN 26-JUL-2001.

XX PD 12-JAN-2001; 2001MO-US001085.

XX PF 19-JAN-2000; 2000US-00489765.

XX PR (ISIS-) ISIS PHARM INC.

XX PA Butler MM, McKay R, Monia BP, Wyatt JR;

XX PI WPI; 2001-457510/49.

XX XX Novel antisense compounds, particularly antisense oligonucleotides for

XX PT inhibiting expression of glycogen synthase kinase 3 beta in cells and for

XX PT diagnosing, treating neurological and insulin regulation disorders.

XX PS Claim 3; Page 82; 106pp; English.

XX XX The invention relates to antisense compounds targeted to nucleic acid

XX CC encoding glycogen synthase kinase 3-beta (GSK3B) (also known as tau

XX CC protein kinase I (TPK-I)). The antisense compound is useful for

XX CC inhibiting the expression of glycogen synthase kinase 3-beta enzyme in

XX CC cells or tissues and for treating diseases or conditions associated with

XX CC the enzyme such as insulin regulation disorder, in particular diabetes

XX CC and neurological disorder, e.g. Alzheimer's disease and bipolar illness.



CC The antisense compound is also useful for diagnosing diseases associated  
 CC with the expression of glycogen synthase kinase 3-beta and for  
 CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour  
 CC formation and as a research reagent. The present sequence is an antisense  
 CC compound targeted to human glycogen synthase kinase 3-beta mRNA  
 XX

SO Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2502 CTCGAGCTCTGGGAAAGCT 2521  
 Db 20 CTCGAGATCATGAGAAAGCT 1

RESULT 2651  
 AAS43158  
 ID AAS43158 standard; DNA; 20 BP.

AC AAS43158;

DT 18-DEC-2001 (first entry)

DE Human Syn-2 gene 3' splice acceptor, exon 2.

XX Human; Oestrogen receptor beta; ERbeta; ds; SNP; chromosome 6q.25.1;  
 KW single nucleotide polymorphism; cardiovascular disease;  
 KW autoimmune disease; systemic lupus erythematosus; arthritis; rheumatism;  
 KW osteoarthritis; osteoporosis; breast cancer; endometrial cancer;  
 KW 3' acceptor site.

XX Homo sapiens.

XX MO200162793-A2.

XX 30-AUG-2001.

XX 20-FEB-2001; 2001W0-US005360.

XX 22-FEB-2000; 2000US-0183755P.

XX 24-JAN-2001; 2001US-00768185.

XX (PEKE) PB CORP NY.

XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen BS;

XX WPI; 2001-582041/65.

PT Estrogen receptor gene and protein polymorphisms useful for diagnosis of  
 PT individuals at risk of developing bone disorders.

XX Example 2, Page 56; 245bp; English.

CC The invention relates to a novel isolated peptide comprising or  
 CC consisting of an amino acid sequence selected from an amino acid sequence  
 CC of a variant oestrogen receptor protein (e.g. ERbeta), or a fragment of  
 CC 10 amino acids, antibodies against them, nucleic acids encoding them  
 CC (including vectors for transforming cells). The gene for human ERbeta is  
 CC located on chromosome 6q.25.1. The variants are encoded by single  
 CC nucleotide polymorphisms (SNP). The variant peptides and proteins can be  
 CC used in assays to determine the biological activity of the protein, to  
 CC raise antibodies, as a reagent in assays designed to quantitatively  
 CC determine levels of the protein in biological fluids, to identify  
 CC compounds that modulate receptor activity and to screen compounds for the  
 CC ability to stimulate or inhibit interaction between the receptor protein  
 CC and a target molecule that normally interacts with the receptor protein  
 CC e.g. oestrogen. The antibody can be used to isolate the protein, to  
 CC assess expression in disease states e.g. cardiovascular disease and  
 CC autoimmune disease (e.g. systemic lupus erythematosus, arthritis,  
 CC rheumatism and osteoarthritis), osteoporosis, breast cancer and  
 CC endometrial cancer. In addition the antibodies can be used in

CC pharmacogenomic analysis and inhibiting protein function, e.g. blocking  
 CC the binding of the oestrogen receptor protein to a binding partner such  
 CC as a ligand. The nucleic acids encoding the proteins can be used as  
 CC probes, primers, chemical intermediates and in biological assays. The  
 CC present sequence is a 3' splice acceptor site from the human ERbeta gene  
 XX

SO Sequence 20 BP; 7 A; 1 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2408 GCTGATTAAAGATTGAAAT 2427  
 Db 1 GCTGATTAAAGATTGAAAT 20

RESULT 2652  
 AAF61663/C  
 ID AAF61663 standard; DNA; 20 BP.

AC AAF61663;

DT 02-JUL-2001 (first entry)

DE Lactobacillus sp 23S rRNA/5S rRNA specific probe SEQ ID 98.

XX 23S rRNA; 5S rRNA; detection; probe; brewing; beer; contamination; ss.

XX Lactobacillus sp.

XX DE19945964-A1.

XX 05-APR-2001.

XX 24-SEP-1999; 99DE-01045964.

XX 24-SEP-1999; 99DE-01045964.

XX (BIOT-) BIOTRECON DIAGNOSTICS GMBH.

XX Fandke M, Gaeck A, Berghof K;

XX WPI; 2001-246136/26.

PT Detecting contaminating microorganisms in brewing, by nucleic acid  
 PT amplification and hybridization, either non-specific or genus- or species  
 PT -specific.

XX Claim 9(i); Page 18; 48bp; German.

CC This invention describes a novel method for detecting microorganisms (A)  
 CC of importance in brewing which comprises treating a sample with at least  
 CC two primers (P1) that hybridize to a consensus region in the nucleic acid  
 CC of (A), at least part of the microbial nucleic acid is amplified, the  
 CC amplicon is treated with at least one probe (P2) that hybridizes  
 CC specifically with a sequence common to all (A) or specific for one or  
 CC more families, genera or species, and any formation of hybrids is  
 CC detected. The method is used to detect, identify and/or characterize  
 CC microorganisms in beer or brewing materials, particularly for detecting  
 CC contamination. The method may detect the entire range of contaminating  
 CC microbes, either as a general test for contamination or as a test  
 CC specific for particular genera or (sub)species. It is quicker than known  
 CC microbiological methods, and can detect several organisms in the same  
 CC sample, including organisms not presently recognized as contaminants. The  
 CC method provides an early indication of contamination and can be automated  
 CC for high throughput analysis

SO Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3487 TCAAGGCTGTATTTCATA 3506  
DB 20 TCAGGGGTCTTACTTCATA 1

RESULT 2653

ABK53149/c  
ID ABK53149 standard; DNA; 20 BP.

ABK53149;

29-AUG-2003 (revised)  
DT 12-AUG-2002 (first entry)

HIV-1 Gag gene specific oligonucleotide primer #13.

HIV; human immunodeficiency virus; ss; primer; gag; pol; protease;  
reverse transcriptase; infection; PCR.

Human immunodeficiency virus 1.

US2002055095-A1.

09-MAY-2002.

31-AUG-2001; 2001US-00944036.

01-SEP-2000; 2000US-0229790P.

(YANG/) YANG Y. Y.  
PA (BREN/) BRENTANO S. T.

PA (BARO/) BAROLA O.

PA (TRAN/) TRAN N.

PA (VERN/) VERNET G.

YANG Y, Brentano ST, Babola O, Tran N, Vernet G;  
PI WPI; 2002-462902/49.

New nucleic acid oligomers for amplifying a nucleotide sequence from HIV-1 and probes for detecting the amplified product are specific for gag and pol regions and are useful to detect different subtypes of HIV-1.

Claim 1; Page 27; 37pp; English.

This invention relates to a series of nucleic acid oligomers for amplifying and detecting a nucleotide sequence of human immunodeficiency virus type 1 (HIV-1). The invention also comprises a labeled oligonucleotide that specifically hybridises to an HIV-1 sequence derived from gag or pol sequences, having one of the sequences fully defined in the specification, and a method for detecting HIV-1 in a biological sample, comprising mixing the sample with two or more of the amplification oligomers that specifically amplify at least one HIV-1 target sequence within gag and a pol sequence which is a protease or reverse transcriptase sequence, amplifying the target, and detecting the amplified product. The oligonucleotides of the invention may be used to diagnose HIV-1 infection. The presents sequence represents a PCR primer used to amplify the HIV-1 Gag gene in the HIV detection method of the invention. (Updated on 29-AUG-2003 to standardise OS field)

Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2777 TGTGACAAATATGGGCATCA 2796  
DB 20 TGTGCAAGAGAGGCATCA 1

RESULT 2654

AAD46651/c  
ID AAD46651 standard; DNA; 20 BP.  
AC AAD46651;

27-JAN-2003 (first entry)

Human ABC11 exon18/intron18 junction site.

ABCC11 protein; paroxysmal kinesigenic choreoathetosis; inflammation;  
cholesterol transport; gene therapy; human; ds.

Homo sapiens.

Location/Qualifiers

FT exon 1.10 /tag= a

FT /number= 1 /note= "partial"

FT intron 11.20 /tag= b

FT /number= 1 /note= "partial"

WO200272632-A2.

19-SEP-2002.

05-MAR-2002; 2002WO-EP003241.

05-MAR-2001; 2001US-0272757P.

(AVET ) AVENTIS PHARMA SA.  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.

Rosier-Montus M, Prades C, Arnould-Reguigne I, Dean M;  
PI Allikmeers R, Denefle P;

WPI; 2002-723321/78.

New ABC11 nucleic acids and proteins, useful in manufacturing a medicament for treating and/or preventing paroxysmal kinesigenic choreoathetosis, or pathologies linked to the transport of lipophilic substances.

Disclosure; Page 43; 118pp; English.

The invention relates to novel ABC11 nucleic acids and proteins. ABC11 sequences are used in the manufacture of a medicament for treating and/or preventing subjects affected by paroxysmal kinesigenic choreoathetosis. They may be used for treating or preventing subjects affected by a dysfunction of the transport of anionic drugs such as methotrexate, or neutral drugs conjugated to acidic ligands such as GSH, glucuronate, or sulphate conjugated drugs. Compositions comprising the ABC11 polypeptide may also be used in the treatment and/or prevention of a deficiency in the transport of cholesterol or inflammatory lipid substances and diseases mapped on the chromosome locus 16q12. ABC11 protein can be used to treat pathologies linked to the transport of lipophilic substances. The invention is used in gene therapy. The present sequence is human ABC11 exon/intron junction site

Sequence 20 BP; 2 A; 4 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1372 TGGCCTGATCCCGAGGCC 1391  
DB 20 TGGCACTCACCCGAGCC 1

RESULT 2655

```

ABN74831
ID ABN74831 standard; DNA; 20 BP.
AC ABN74831;
XX
XX
DT 26-JUL-2002 (first entry)
XX
DE Human and mouse caspase 2 antisense inhibitor oligonucleotide #6.
XX
XX Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective;
XX neuroprotective; antileptemic; antiinflammatory; antimicrobial;
XX haematopoietic disorder; bone metabolism disorder; cholesterol disorder;
XX hyperproliferative disorder; cancer; blood disorder; stroke;
XX brain injury; neurodegenerative disease; infection; inflammation; tumour;
XX ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= m5c, OTHER
XX /note= "Nucleotides 1-5 and 16-20 are five-nucleotide
XX wings consisting 2'methoxyethyl (2'-MOE) nucleotides, 6-
XX 15 are 2'deoynucleotides, backbone linkages are
XX phosphodiester, all cytosines are 5-methylcytidines"
XX
XX MO200224720-A1.
XX
XX 28-MAR-2002.
XX
XX 14-SEP-2001; 2001WO-US028631.
XX
XX 20-SEP-2000; 2000US-00667018.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Zhang H, Watt AT;
XX
XX WPI; 2002-351998/38.
XX
XX New antisense compounds targeted to nucleic acid molecule encoding
XX caspase 2, useful for treating diseases or conditions associated with
XX caspase 2, e.g. cancer, blood disorders, stroke, brain injury and
XX neurodegenerative diseases.
XX
XX Claim 3; Page 98; 146pp; English.
XX
XX The invention relates to a compound 8-50 nucleobases in length targeted
XX to a nucleic acid molecule encoding caspase 2, which specifically
XX hybridises with and inhibits the expression of caspase 2, or specifically
XX hybridises with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding caspase 2. The activity of antisense
XX oligonucleotides of the invention may be described as, cytostatic,
XX osteopathic, cerebroprotective, neuroprotective, antileptemic,
XX antiinflammatory and antimicrobial. The antisense compounds are useful
XX for treating an animal having a disease or condition associated with
XX caspase 2, such as haematopoietic disorder, bone metabolism disorder,
XX cholesterol disorder, or a hyperproliferative disorder. These compounds
XX may further be used as research reagents and diagnostics, to distinguish
XX between functions of various members of a biological pathway, in the
XX treatment of a disease or disorder which can be treated by modulating the
XX expression of caspase 2, including cancer, blood disorders, stroke, brain
XX injury and neurodegenerative diseases. They may also be used for
XX prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
XX formation. Records ABN74810-ABN74952 represent caspase 2 mRNA inhibitor
XX oligonucleotides
XX
XX Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy 3307 TGTCCAGTGAAGTCCAAATT 3326
Db 1 TCTCCAGTGAAGTGCACATT 20

RESULT 2656
ABA93055/c
ID ABA93055 standard; DNA; 20 BP.
XX
XX ABA93055;
XX
XX 11-APR-2002 (first entry)
XX
XX Mouse membrane bound type netrin PCR primer SEQ ID NO:20.
XX
XX Mouse; membrane bound type netrin; glycosylphosphatidylinositol; GPI;
XX netrin B1; PCR primer; ss.
XX
XX Mus musculus.
XX
XX JP2001327289-A.
XX
XX 27-NOV-2001.
XX
XX 19-MAY-2000; 2000JP-00148843.
XX
XX 19-MAY-2000; 2000JP-00148843.
XX
XX (RIKA ) RIKAGAKU KENKYUSHO.
XX
XX WPI; 2002-127068/17.
XX
XX Membrane bound type netrin.
XX
XX Claim 12; Page 8; 41pp; Japanese.
XX
XX The present invention describes a membrane bound type netrin having a
XX hydrophobic region which can be combined to the cell membrane through
XX glycosylphosphatidylinositol (GPI) at its C-terminal. Also described are:
XX (1) a polynucleotide encoding a membrane bound type netrin; (2) an
XX expression vector containing the polynucleotide or its fragment; (3) a
XX host cell transfected by the expression vector; and (4) a primer used for
XX the amplification of a membrane bound type netrin. The primer can be used
XX in the treatment and diagnosis of diseases requiring increased expression
XX of netrin B1 protein. The present sequence represents a specifically
XX claimed PCR primer for a mouse membrane bound type netrin from the
XX present invention
XX
XX Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 377 GGTTCCCGACTGTGCAGCT 396
Db 20 GGCTCCCGCAGCACTGCTGCT 1

RESULT 2657
ABA89831
ID ABA89831 standard; DNA; 20 BP.
XX
XX ABA89831;
XX
XX 11-FEB-2002 (first entry)
XX
XX Human Syne-2 exon-intron boundary 3' splice acceptor #2.
XX
XX Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syne-2;
XX synaptic nuclei expressed gene 2; haplotype; cytoskeletal; osteopathic;
XX cardiac; vasotropic; gene therapy; vaccine; cancer; osteoporosis;
XX

```

KW cardiovascular disease; oestrogen receptor; ds.  
 XX Homo sapiens.  
 XX MO200162969-A2.  
 XX  
 XX 30-AUG-2001.  
 XX  
 XX 20-FEB-2001; 2001WO-US005358.  
 XX  
 XX 22-FEB-2000; 2000US-0183756P.  
 PR 20-OCT-2000; 2000US-00692414.  
 PR 24-JAN-2001; 2001US-00768184.  
 XX  
 XX (PEKE ) PE CORP NY.  
 PA  
 PI Kalush F, Casael MJ, Hwang SS, Winn-Deen ES,  
 XX WPI; 2002-041152/05.  
 XX  
 XX Novel variant of oestrogen receptor alpha polypeptide useful for  
 PT determining the biological activity of a protein for high throughput  
 PT screening and for raising antibodies that elicit an immune response in  
 PT host.  
 XX  
 XX Example; Page 57; 33pp; English.  
 PS  
 XX The present invention describes an isolated peptide (I) consisting of an  
 CC amino acid sequence selected from: (a) the amino acid sequence of a  
 CC variant of the oestrogen receptor alpha (ESR-alpha) protein in AAG68251;  
 CC or (b) a fragment comprising at least 10 contiguous amino acids of the  
 CC protein in AAG68251. (I) has cytostatic, osteopathic, cardiant and  
 CC vasoconstrictor activities, and can be used in gene therapy and vaccine  
 CC production. (I) is useful for identifying an agent that binds to (I), by  
 CC contacting (I) with an agent and assaying the contacted mixture to  
 CC determine whether a complex is formed with the agent bound to the  
 CC peptide. A polynucleotide (II), encoding (I), is useful in the  
 CC development of diagnostic and therapies for diseases and disorders  
 CC mediated/modulated by an oestrogen receptor (ER). (II) is also useful in  
 CC gene therapy for treating cancer, osteoporosis and cardiovascular  
 CC diseases. The human ESR-alpha gene is located on chromosome 6. ABA89779  
 CC to ABA89828 represent oligonucleotides covering human ER exon-intron  
 CC boundaries, and ABA89829 to ABA89868 represent oligonucleotides covering  
 CC human synaptic nuclei expressed gene 2 exon-intron boundaries, which are  
 CC used in an example from the present invention  
 CC  
 XX  
 XX Sequence 20 BP; 7 A; 1 C; 5 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 2408 GCTGATTAAAGATTGAAAT 2427  
 Db 1 GCTGATTAAAGTATTGAAAT 20  
 RESULT 2658  
 ABT06305  
 ID ABT06305 standard; DNA; 20 BP.  
 XX  
 XX ABT06305;  
 AC  
 XX  
 XX 24-OCT-2002 (first entry)  
 DT  
 XX  
 XX Human NOVX coding sequence PCR primer SEQ ID NO: 129.  
 DE  
 XX Human; NOVX; autoimmune disease; cancer; infection; inflammatory disease;  
 KW storage disorder; muscle disorder; neurodegenerative disorder; noctropic;  
 KW developmental defect; neuroprotective; antiparkinsonian; hypotensive;  
 KW hyperemesis; haemostatic; cardiant; antiparkinsonian; dermatological;  
 KW immunosuppressive; antiinflammatory; virucide; antibacterial; anti-HIV;  
 KW antiparasitic; antiallergic; antitachycardic; antitachycardic; antiarthritis;

KW vulnery; anorectic; antidiabetic; immunomodulator; antipsoriatic;  
 KW nephrotoxic; kerolytic; antilicer; cerebroprotective; anticonvulsant;  
 KW antinfertility; antitonic; antidepressant; metabolic; cyostatic;  
 KW tranquilizer; analgesic; probe; PCR; primer; ss.  
 XX  
 XX Homo sapiens.  
 XX MO200257450-A2.  
 XX  
 XX 25-JUL-2002.  
 XX  
 XX 29-NOV-2001; 2001WO-US048922.  
 XX  
 XX 29-NOV-2000; 2000US-0253834P.  
 PR 30-NOV-2000; 2000US-0250926P.  
 PR 25-JAN-2001; 2001US-0264180P.  
 PR 20-AUG-2001; 2001US-0133566P.  
 PR 05-OCT-2001; 2001US-0327456P.  
 PR 28-NOV-2001; 2001US-00327456.  
 XX  
 XX (CURA-) CURAGEN CORP.  
 PA  
 PI Binger S, Macdougall JR, Millet I, Ellerman K, Stone DJ,  
 XX Gerlach V, Grosse WM, Alsdbrook JP, Lepley DM, Rieger D, Burgess CE;  
 PI Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M, Mishra V;  
 PI Paturajan M, Shenoy S, Rastelli L, Tcherev VT, Verne CM;  
 PI Zernhusen BD, Malyankar UM, Guo X, Miller CE, Gangolli EA;  
 XX WPI; 2002-590741/63.  
 XX  
 XX Novel isolated polypeptide, designated NOVX, useful for treating or  
 PT preventing in NOVX-associated disorders e.g. cardiomyopathy,  
 PT atherosclerosis, diabetes, cancer, allergy, asthma, Crohn's disease.  
 PT  
 XX Example 1; Page 211; 353pp; English.  
 PS  
 XX The present invention provides the protein and coding sequences of  
 CC several novel human proteins, designated NOVX. These can be used in the  
 CC treatment of, amongst others, cancers, autoimmune diseases, infections,  
 CC inflammatory diseases, storage disorders, muscle disorders,  
 CC neurodegenerative diseases and developmental defects. The present  
 CC sequence is a PCR primer or probe used to isolate the sequences of the  
 CC invention. All of the probes are modified at the 5' end by TEF and at the  
 CC 3' end by TMBRA  
 CC  
 XX  
 XX Sequence 20 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 174 GCGCTGCTGCTGCTGCTGCT 193  
 Db 1 GCCATGCTGCTGCTGCTGCT 20  
 RESULT 2659  
 ABZ29930  
 ID ABZ29930 standard; DNA; 20 BP.  
 XX  
 XX ABZ29930;  
 AC  
 XX  
 XX 30-JAN-2003 (first entry)  
 DT  
 XX  
 XX Candida albicans GRACE strain PCR primer SEQ ID NO 4081.  
 DE  
 XX Fungus; Yeast; tetracycline; promoter; GRACE strain; biosynthesis;  
 KW signal transduction; DNA replication; cell division; growth;  
 KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.  
 XX  
 XX Candida albicans.  
 OS  
 XX MO200253728-A2.  
 PN

```

XX 11-JUN-2002.
PD Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
XX 26-DEC-2001; 2001WO-US049486.
XX 29-DEC-2000; 2000US-0259128P.
XX 20-FEB-2001; 2001US-00792024.
XX 22-AUG-2001; 2001US-0314050P.
XX (ELIT-) ELITRA PHARM INC.
XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
XX WPI; 2002-566694/60.
XX Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.
XX Claim 36; SEQ ID NO 4081; 167pp + Sequence Listing; English.
XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous
XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal
XX cells in which both alleles of a gene are modified. The diploid fungal
XX cells having both alleles modified are useful for identifying a gene that
XX is essential to the survival or growth of a fungus, a gene that
XX contributes to the virulence and/or pathogenicity of a fungus, a gene
XX that contributes to the resistance of a diploid fungus to an antifungal
XX agent, an antifungal agent that inhibits the growth of a diploid fungus
XX and for identifying a therapeutic agent for treatment of a mammalian
XX disease. (M1) is useful for identifying a compound which modulates the
XX activity of a gene product, preferably enzymatic activity, carbon
XX compound catabolism, biosynthetic, transporter, transcriptional,
XX translational, signal transduction, DNA replication and cell division
XX activity. The method is useful for identifying a compound having the
XX ability to inhibit growth or proliferation of C. albicans cells and for
XX treating infection by C. albicans. The present sequence is that of a PCR
XX primer used in the method of the invention. Note: The sequence data for
XX this patent is not represented in the printed specification but is based
XX on sequence information supplied to Derwent by the European Patent Office
XX
SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 177 CTGCTGCTGCTGCTGCTGCGC 196
Db 1 CTGCTGCTGCTGCTGCTGCTGAC 20
RESULT 2660
ABL94386
ID ABL94386 standard; DNA; 20 BP.
XX ABL94386;
XX
XX 29-JUN-2002 (first entry)
XX Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:152.
XX
XX Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2;
XX LBP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; ACP/EBP; ACP/EBP;
XX transcription factor; tissue development; cellular function;
XX proliferation; differentiation; hormone responsiveness;
XX oxidative stress response; IL-6 signalling mediator; interleukin-6;
XX carbohydrate metabolism; immunity; Th1 response; female fertility;

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XX gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;
XX infection; inflammation; expression inhibition; phosphorothioate;
XX antisense oligonucleotide; 85.
XX Mus musculus.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Phosphorothioate linkages"
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
XX cytosines are 5-methylcytosine"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
XX cytosines are 5-methylcytosine"
XX
XX US6271030-B1.
XX
XX 07-AUG-2001.
XX
XX 14-JUN-2000; 2000US-00593711.
XX
XX 14-JUN-2000; 2000US-00593711.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Butler MM, Wyatt J;
XX WPI; 2002-214451/27.
XX
XX Novel antisense compound targeted to nucleic acids encoding human or
XX mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
XX inhibiting expression of human or mouse C/EBP beta in cells/tissues.
XX
XX Example 17; Col 49-50; 69pp; English.
XX
XX Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
XX to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
XX gene, which inhibit its expression. The antisense oligonucleotides were
XX designed to target different regions of the human and/or mouse C/EBP
XX alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
XX by quantitative real-time PCR. The C/EBP family of proteins are a family
XX of transcription factors which regulate the expression of a wide range of
XX genes that control normal tissue development, cellular function, cellular
XX proliferation and functional differentiation. C/EBP beta (also known as
XX C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, ACP/EBP and ACP/EBP)
XX primarily regulates hormone responsiveness and oxidative stress responses
XX and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
XX thought to be involved in carbohydrate metabolism, immunity, the Th1
XX response, female fertility and gluconeogenic pathways. C/EBP beta is
XX expressed in the liver, lung, spleen, kidney, brain, and testis, with the
XX highest expression found in the lung. It is also expressed at a higher
XX level in malignant ovarian tissue compared with normal ovarian tissue,
XX and its expression in pancreas is upregulated in response to chronically
XX elevated levels of glucose, indicating that it is involved in the
XX impairment of insulin secretion in type II diabetes. The oligonucleotides
XX of the invention are useful for diagnosis, prevention and treatment of
XX conditions associated with C/EBP beta expression, such as cancer
XX (particularly ovarian cancer), tumour formation, diabetes (particularly
XX type II diabetes), infection, or inflammation
XX
SQ Sequence 20 BP; 0 A; 9 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY      176 GCTGCTGCTGCTGCTGCTG 195
      ||||| ||||| ||||| |||||
Db      1 GGTGCGCGCTGCTGCGCTCG 20

RESULT 2661
ABL94252
ID      ABL94252 standard; DNA; 20 BP.
XX
XX      ABL94252;
AC
XX      29-JUL-2002 (first entry)
DT
XX
XX      Human C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:18.
DE
XX
XX      Human, C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2; LAP;
KM      TCF5; CREB2; NFIL6; IL6BP; NF-M; AGP/EBP; ApC/EBP; transcription factor;
KM      tissue development; cellular function; proliferation; differentiation;
KM      hormone responsiveness; oxidative stress response;
KM      IL-6 signalling mediator; interleukin-6; carbohydrate metabolism;
KM      immunity; Tnl response; female fertility; gluconeogenesis; ovarian;
KM      cancer; tumour formation; type II; diabetes; infection; inflammation;
KM      expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
XX
XX      Homo sapiens.
OS
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate linkages"
FT      modified_base 1..5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT      modified_base 16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT      cytosines are 5-methylcytosine"
FT      cytosines are 5-methylcytosine"
XX
XX      US6271030-B1.
XX
XX      07-AUG-2001.
XX
XX      14-JUN-2000; 2000US-00593711.
XX
XX      14-JUN-2000; 2000US-00593711.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Monia BP, Butler MM, Wyatt J;
XX
XX      WPI; 2002-214451/27.
XX
XX      Novel antisense compound targeted to nucleic acids encoding human or
PT      mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
PT      inhibiting expression of human or mouse C/EBP beta in cells/tissues.
XX
XX      Claim 1; Col 42; 69pp; English.
XX
XX      Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
CC      to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
CC      gene, which inhibit its expression. The antisense oligonucleotides were
CC      designed to target different regions of the human and/or mouse C/EBP
CC      alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
CC      by quantitative real-time PCR. The C/EBP family of proteins are a family
CC      of transcription factors which regulate the expression of a wide range of
CC      genes that control normal tissue development, cellular function, cellular
CC      proliferation and functional differentiation. C/EBP beta (also known as
CC      C/EBP2, LAP, TCF5, CREB2, NFIL6, IL6BP, NF-M, AGP/EBP and ApC/EBP)
CC      primarily regulates hormone responsiveness and oxidative stress responses

```

```

CC      and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
CC      thought to be involved in carbohydrate metabolism, immunity, the Tnl
CC      response, female fertility and gluconeogenic pathways. C/EBP beta is
CC      expressed in the liver, lung, spleen, kidney, brain, and testis, with the
CC      highest expression found in the lung. It is also expressed at a higher
CC      level in malignant ovarian tissue compared with normal ovarian tissue,
CC      and its expression in pancreas is upregulated in response to chronically
CC      elevated levels of glucose, indicating that it is involved in the
CC      impairment of insulin secretion in type II diabetes. The oligonucleotides
CC      of the invention are useful for diagnosis, prevention and treatment of
CC      conditions associated with C/EBP beta expression, such as cancer
CC      (particularly ovarian cancer), tumour formation, diabetes (particularly
CC      type II diabetes), infection, or inflammation
XX
XX      Sequence 20 BP; 0 A; 9 C; 8 G; 3 T; 0 U; 0 Other;
SQ
XX
XX      Query Match      0.1%; Score 15.2; DB 1; Length 20;
XX      Best Local Similarity 85.0%; Pired. No. 1.9e+03;
XX      Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY      180 CTGCTGCTGCTGCTGCGGG 199
      ||||| ||||| ||||| |||||
Db      1 CTGCTGCGCGCTGCGCGG 20

RESULT 2662
ABK69264/C
ID      ABK69264 standard; DNA; 20 BP.
XX
XX      ABK69264;
AC
XX      15-JUL-2002 (first entry)
DT
XX
XX      Chimeric phosphorothioate oligonucleotide #16 for caspase 9 inhibition.
DE
XX
XX      Antisense compound; caspase 9; C9; hyperproliferative disorder; stroke;
KM      haematopoietic disorder; cholesterol disorder; bone metabolism disorder;
KM      brain injury; neurodegenerative disease; infection; inflammation; tumour;
KM      phosphorothioate backbone linkage; 2'-methoxyethyl; 2'-MOE; ss.
XX
XX      Homo sapiens.
XX
XX      OS
XX      Synthetic.
XX      Chimeric.
XX
XX      Key      Location/Qualifiers
FH      modified_base 1..20
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "Phosphorothioate nucleotides, all cytidine
FT      modified_base 1..5
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT      modified_base 16..20
FT      /*tag= c
FT      /mod_base= OTHER
FT      /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX      WO200222641-A1.
XX
XX      21-MAR-2002.
XX
XX      10-SEP-2001; 2001WO-US028233.
XX
XX      11-SEP-2000; 2000US-00659845.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Zhang H, Watt AT;
XX
XX      WPI; 2002-351874/38.
XX

```

PT New antisense oligonucleotide which modulates expression of caspase 9,  
 PT useful to treat tumor, inflammation or to prevent infection in humans.  
 XX  
 PS Claim 26; Page 91; 145pp; English.

CC The present invention relates to a new antisense compound targeted to a  
 CC nucleic acid molecule encoding caspase 9 (C9). The compound specifically  
 CC hybridises with and inhibits the expression of caspase 9. The invention  
 CC also describes an antisense compound that specifically hybridises with an  
 CC 8 nucleotide portion of an active site of the nucleic acid. The invention  
 CC is useful for inhibiting the expression of C9 in cells or tissues and is  
 CC also useful for treating an animal having a disease or condition  
 CC associated with C9, including a hyperproliferative, haematopoietic or  
 CC cholesterol disorder, bone metabolism disorder, stroke, brain injury or  
 CC neurodegenerative disease. The compound is commonly useful as a research  
 CC and diagnostics reagent. It is also useful to distinguish between  
 CC functions of various members of a biological pathway. The invention is  
 CC also useful prophylactically e.g. to prevent or delay infection,  
 CC inflammation or tumour formation. The antisense compound of the invention  
 CC is often preferred over native form because of enhanced cellular uptake,  
 CC enhanced affinity for nucleic acid target and increased stability in  
 CC presence of nucleases. The present nucleic acid sequence represents one  
 CC of a collection (ABK69249-ABK69396) of chimeric phosphorothioate  
 CC oligonucleotides having 2'-methoxyethyl (2'-MOE) wings. This sequence was  
 CC used in the methods of the invention for inhibition of caspase 9

XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 580 CTTACATCTCTGAACATCAAG 599  
 Db 20 CTTACATCTCTGAACATCAAG 1

RESULT 2663  
 AAL45511/c  
 ID AAL45511 standard; DNA; 20 BP.  
 XX  
 AC AAL45511;  
 XX  
 DT 29-AUG-2003 (revised)  
 DT 06-JUN-2002 (first entry)  
 XX  
 DE HIV-1 gag amplification oligomer SEQ ID NO: 49.  
 XX  
 KW HIV-1; gag gene; pol gene; PCR; primer; drug resistance; genetic subtype;  
 KW probe; ss.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO200220852-A1.  
 XX  
 PD 14-MAR-2002.  
 XX  
 PF 01-SEP-2000; 2000WO-US024117.  
 XX  
 PR 01-SEP-2000; 2000WO-US024117.  
 XX  
 PA (GENP-) GEN-PROBE INC.  
 PA (INMR) BIOMERIEUX SA.  
 XX  
 PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
 XX  
 DR WPI; 2002-292273/33.  
 XX  
 PT New nucleic acid oligomer, useful for detecting selected regions of gag  
 PT and pol genes of human immune deficiency virus, particularly for  
 PT assessing drug resistance.  
 XX  
 PS Claim 1; Page 63; 82pp; English.

XX The present invention provides a number of nucleic acid oligomers which  
 CC can be used to amplify the gag and pol genes of human immunodeficiency  
 CC virus type 1 (HIV-1). These are used to detect regions of the gag and pol  
 CC genes, especially regions associated with drug resistance, and also for  
 CC identifying genetic subtypes of the virus. The present sequence is an  
 CC oligomer of the invention. (Updated on 29-AUG-2003 to standardise OS  
 CC field)

XX Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2777 TGTGCAAAATATGGCATCA 2796  
 Db 20 TGTGCAAAAGAGGCATCA 1

RESULT 2664  
 ADA44733/c  
 ID ADA44733 standard; DNA; 20 BP.  
 XX  
 AC ADA44733;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Antisense oligonucleotide #ISIS 115405 #SEQ ID 31.  
 XX  
 KW Antisense oligonucleotide; cytostatic; immunosuppressive;  
 KW anti-inflammatory; gene therapy; hyperproliferative disorder; cancer;  
 KW autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;  
 KW human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN Key Location/Qualifiers  
 XX modified\_base 1..20  
 XX /\*tag= b  
 XX /mod\_base= OTHER  
 XX /note= "Phosphorothioate linkages, all cytosines are 5-  
 XX methylcytosine"  
 XX 1..5  
 XX /\*tag= a  
 XX /mod\_base= OTHER  
 XX /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 XX 16..20  
 XX /\*tag= c  
 XX /mod\_base= OTHER  
 XX /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN WO2003031576-A2.  
 XX  
 PD 17-APR-2003.  
 XX  
 PF 03-OCT-2002; 2002WO-US031809.  
 XX  
 PR 06-OCT-2001; 2001US-00972607.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monica BP, Wyatt JR;  
 XX  
 DR WPI; 2003-457242/43.  
 XX  
 PT New compound having sequence targeted to nucleic acid encoding inhibitor-  
 PT kappa B kinase-gamma, useful for preparing composition for treating e.g.,  
 PT cancer, or inflammatory or autoimmune disorder.  
 XX  
 PS Claim 3; Page 77; 106pp; English.  
 XX  
 CC The invention relates to an antisense compound that is targeted to a

CC nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically  
 CC hybridizing to the nucleic acid encoding inhibitor-kappa B kinase-gamma  
 CC and inhibiting its expression. Compounds of the invention are antisense  
 CC oligonucleotides comprising at least one modified internucleoside  
 CC linkage, which is a 2'-O-methoxyethyl sugar moiety, at least one modified sugar  
 CC moiety, which is a 2'-O-methoxyethyl sugar moiety, or at least one  
 CC modified nucleobase, which is a 5-methylcytosine. Preferably, the  
 CC antisense oligonucleotide is a chimeric oligonucleotide. The compound of  
 CC the invention is useful for preparing a composition for treating a  
 CC hyperproliferative disorder e.g., cancer, or an autoimmune or  
 CC inflammatory disorder. The methods are useful for inhibiting the  
 CC expression of inhibitor-kappa B kinase-gamma in cells or tissues, and  
 CC treating an animal having a disease or condition associated with  
 CC inhibitor-kappa B kinase-gamma. Sequences given in ADA44713-ADA44790  
 CC represent antisense oligonucleotides for the inhibition of human  
 CC inhibitor-kappa B kinase-gamma mRNA levels.

SQ Sequence 20 BP; 3 A; 11 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1714 AGGCTCTGCGAAGATGAG 1733  
 Db 20 AGGCTCTGCGAGGTGAG 1

RESULT 2665  
 ADA50028/c  
 ID ADA50028 standard; DNA; 20 BP.  
 AC ADA50028;  
 XX  
 XX 20-NOV-2003 (first entry)  
 DT  
 XX  
 DE Sequencing oligonucleotide #1.  
 XX  
 KW ss; nucleic acid sequencing; collision-induced dissociation spectrum;  
 KM CID spectrum; point mutation.  
 OS Synthetic.  
 XX  
 PN WO2003025219-A2.  
 XX  
 XX 27-MAR-2003.  
 PD  
 XX  
 PF 12-SEP-2002; 2002WO-EP010235.  
 XX  
 PR 14-SEP-2001; 2001AT-00001444.  
 XX  
 PA (HOF ) ROCHE DIAGNOSTICS GMBH.  
 PA (HOF ) HOFFMANN LA ROCHE & CO AG F.  
 XX  
 XX  
 PI Huber C, Oberacher H;  
 XX  
 DR WPI; 2003-313361/30.  
 XX  
 PT Sequencing nucleic acid, useful particularly for identifying mutations,  
 PT by collision-induced dissociation mass spectrometry and comparing  
 PT measured and reference spectra.  
 XX  
 XX Example 1; Page 6; 21pp; German.  
 XX  
 CC This invention describes a method for sequencing nucleic acids comprising  
 CC comparing a value of a collision-induced dissociation (CID) spectrum,  
 CC calculated for an assumed sequence, with the measured spectrum, and  
 CC calculating the degree of correspondence. At least one position in the  
 CC assumed sequence is altered and the degree of correspondence calculated.  
 CC again. The correspondence between calculated and measured spectra is  
 CC determined using an algorithm which establishes whether, at a site being  
 CC examined, a measured value is present in the spectrum or not. A higher  
 CC degree of correspondence is assumed when the measured value has higher

CC intensity and reduced deviation from the exact value for m/z (m/z values  
 CC can be determined very exactly, whereas intensity values are more  
 CC difficult to measure). The algorithm may assume that the spectrum  
 CC corresponds exactly to the assumed sequence. Collision-induced  
 CC dissociation is generally initiated by breaking the 3'-carbon-oxygen bond  
 CC of the sugar residue, followed by loss of base and formation of two  
 CC complementary series of ions, with the differences in mass between  
 CC members of the series being determined by the nature of the base.  
 CC Sequence-specific m/z data can be acquired in seconds and for many  
 CC genomic applications can be used to detect minor variations without the  
 CC need for complete sequencing. The method is useful for sequencing nucleic  
 CC acids, especially to locate and identify point mutations, deletions and  
 CC insertions in known sequences. The method can be applied to significantly  
 CC longer sequences than known CID-based processes and significantly reduces  
 CC the number of false 'hits' and incorrect error reports. This sequence  
 CC represents an oligonucleotide used to illustrate the method of the  
 CC invention.

SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3025 GCAAGCAAGCTTCTCTGCG 3044  
 Db 20 GCCAGAAAGCTTCTCTGTC 1

RESULT 2666  
 ACA89983  
 ID ACA89983 standard; DNA; 20 BP.  
 AC ACA89983;  
 XX  
 XX 10-JUL-2003 (first entry)  
 DT  
 XX  
 DE Cardiovascular disease differential gene expression related primer #30.  
 XX  
 KW Cardiovascular disease; arteriosclerosis; ischaemia; angina pectoris;  
 KM myocardial infarction; caridiant; antiarteriosclerotic; antianginal;  
 XX  
 XX gene therapy; differential gene expression; PCR; primer; ss.  
 OS Homo sapiens.  
 XX  
 XX  
 XX WO2003031650-A2.  
 PN  
 XX  
 PD 17-APR-2003.  
 XX  
 PF 02-OCT-2002; 2002WO-EP011034.  
 XX  
 XX 08-OCT-2001; 2001GB-00024145.  
 PR  
 XX  
 PA (FARB ) BAYER AG.  
 PA  
 XX  
 XX Munnee M, Gehrmann M, Wick M, Schmitz G;  
 PI  
 XX  
 DR WPI; 2003-403108/38.  
 XX  
 PT Predicting, diagnosing or prognosing a cardiovascular disease, e.g.  
 PT angina, ischemia, myocardial infarction or arteriosclerosis by detection  
 PT of a polynucleotide in a biological sample comprises detecting a  
 PT hybridization complex.  
 XX  
 XX Example 3; Page 103; 454pp; English.  
 PS  
 XX  
 CC The invention describes a method of predicting, diagnosing or prognosing  
 CC a cardiovascular disease by detection of a polynucleotide in a biological  
 CC sample comprises hybridizing at least one of the polynucleotide to a  
 CC nucleic acid material of a biological sample, thus forming a  
 CC hybridisation complex, and detecting the hybridisation complex. The  
 CC polynucleotides, polypeptides, antisense molecule, antibody and reagent  
 CC are useful for preparing compositions for preventing, predicting or



CC diagnosing, or a medicament for treating a cardiovascular disease, e.g.  
CC arteriosclerosis, ischaemia, angina pectoris, or myocardial infarction.  
CC This sequence represents a primer used to identify genes differentially  
CC regulated in individuals with cardiovascular disease  
XX

Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2544 CTGCAGGGGATCCCCAGAT 2563  
Db 1 CTGCAGGGGATCTCCAGAT 20

RESULT 2667  
AAD53637  
ID AAD53637 standard; DNA; 20 BP.

AC AAD53637;

DT 28-MAY-2003 (first entry)

DE Human PTPN2 antisense oligonucleotide, ISIS #135695.

KW Antisense; human; protein tyrosine phosphatase non-receptor type 2;  
KW PTPN2; autoimmune disorder; hyperproliferative condition; cancer;  
KW haematopoietic disorder; gene therapy; phosphothioate; ss.

OS Homo sapiens.  
XX Synthetic.

Key Location/Qualifiers

FT modified\_base 1..20

FT /tag= a

FT /mod\_base= OTHER

FT /note= "Phosphothioate backbone; All cytidine residues

FT modified\_base 1..5

FT /tag= b

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

FT /tag= c

FT /mod\_base= OTHER

FT /note= "2'methoxyethyl nucleotides"

PN WO200294847-A1.

PD 28-NOV-2002.

PE 15-MAY-2002; 2002WO-US015304.

PR 18-MAY-2001; 2001US-00861159.

PA (ISIS-) ISIS PHARM INC.

PI Cowser LM, Freiler SM;

DR WPI; 2003-129407/12.

XX New antisense oligonucleotide compound, for diagnosing, preventing and/or  
XX treating conditions associated with aberrant expression or activity of  
XX protein tyrosine phosphatase non-receptor type 2 (PTPN2) e.g. cancer.  
XX

PS Example 15; Col 88; 57bp; English.

XX The invention relates to antisense compounds targeted to a nucleic acid  
XX a encoding human protein tyrosine phosphatase non-receptor type 2  
XX (PTPN2). Antisense compounds of the invention are used for the diagnosis,  
XX prevention and treatment of diseases or conditions associated with PTPN2  
XX such as autoimmune disorder, hyperproliferative condition e.g. cancer, or

CC a haematopoietic disorder. The invention is useful in antisense gene  
CC therapy. The present sequence is an antisense oligonucleotide targeted  
CC to human PTPN2 DNA. This oligo is used in the exemplification of the  
CC invention  
XX

Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1068 AAATCCAGATCACTCCAAA 1087  
Db 1 AAATCCAGATGCTCCAAA 20

RESULT 2668  
ACF06326/c  
ID ACF06326 standard; DNA; 20 BP.

AC ACF06326;

DT 07-OCT-2003 (first entry)

DE Zebrafish neo reverse PCR primer SEQ ID NO:2.

KW Zebrafish; fish embryo cell line; chimeric fish; genetic; human disease;  
KW neo; PCR primer; ss.

OS Danio rerio.  
XX Synthetic.

PN WO2003051109-A1.

PD 26-JUN-2003.

PE 13-DEC-2002; 2002WO-US039913.

PR 13-DEC-2001; 2001US-0341355P.

PR 12-FEB-2002; 2002CA-02371460.

PA (Purd ) PURDUE RES FOUND.

PI Colloidi P, Fan L, Ma C;

DR WPI; 2003-532958/50.

XX New zebrafish embryo cell line, which becomes a germ cell when introduced  
XX to a fish embryo, useful for making a germ line chimeric zebrafish, which  
XX is a valuable model for genetic studies of human diseases.  
XX

PS Example 2; Page 22; 45bp; English.

XX The present invention describes a fish embryo cell line, where a cell of  
XX the fish embryo cell line, after incubation in vitro for at least 24  
XX hours, will become a germ cell when introduced to a fish embryo. Also  
XX described: (1) making the fish embryo cell line; (2) an isolated fish  
XX embryo cell line obtained by the method of (1); (3) making a germ line  
XX chimeric fish; (4) a germ line chimeric fish obtained by the method of  
XX (3); and (5) cell culture media comprising a growth factor and fish cell  
XX conditioned medium, or a growth factor and a fish cell, where the growth  
XX factor is fibroblast growth factor or epidermal growth factor. The fish  
XX embryo cell line is useful for making a germ line chimeric fish.  
XX particularly zebrafish, which is a valuable model for genetic studies of  
XX human diseases. The present sequence represents a PCR primer for  
XX zebrafish neo, which is used in an example from the present invention  
XX

Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4114 ATCTGCCATCTCGAGAGTTC 4133  
 Db 20 ACCTGCATCAGCGATTTC 1  
 RESULT 2669  
 ID ADA38281/c  
 XX ADA38281 standard; DNA; 20 BP.  
 AC ADA38281;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Antisense oligonucleotide P21 to inhibit PLK1 expression.  
 XX  
 KM polo-like kinase 1; PLK1; proliferative disease; cancer;  
 KM mitotic progression; centrosome maturation; bipolar spindle formation;  
 KM cytokinesis; short interfering RNA; siRNA; shRNA; nuclease inhibitor;  
 KM aurin tricarboxylic acid; ATA; U6; H1 promoter; antiproliferative;  
 KM cytosstatic; ss; antisense oligonucleotide; P21; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003070283-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 21-FEB-2003; 2003WO-EP001809.  
 XX  
 PR 22-FEB-2002; 2002EP-00003982.  
 PR 17-MAY-2002; 2002EP-00011074.  
 PR 08-NOV-2002; 2002EP-00025103.  
 XX  
 PA (STRE/) STREBHARDT K.  
 PI Streibhardt K, Spaenkuch-Schmitt B, Yuan J;  
 XX  
 DR WPI; 2003-697573/66.  
 XX  
 PT New polo-like kinase 1 agent containing duplex RNAs antisense  
 PT oligonucleotides and inhibitory peptides, useful for treating disorders  
 PT with elevated PLK1 expression levels, such as proliferative diseases,  
 PT particularly cancer.  
 XX  
 PS Disclosure; Page 123; 123pp; English.  
 XX  
 CC This invention relates to a novel agent for inhibiting or reducing the  
 CC elevated expression levels of polo-like kinase 1 (PLK1), which are  
 CC associated with the development and progress of proliferative diseases,  
 CC such as cancer. Specifically, PLKs are serine/ threonine kinases that  
 CC play key roles in mitotic progression, contribute to centrosome  
 CC maturation, bipolar spindle formation and are key regulators of  
 CC cytokinesis. The present invention describes agents where at least one  
 CC short interfering RNA (siRNA), preferably an shRNA (hairpin), or  
 CC antisense RNA is directed against the PLK1 gene as active agent.  
 CC Additionally, the agent must comprise a nuclease inhibitor, for example,  
 CC aurin tricarboxylic acid (ATA) and an RNA specific promoter such as the  
 CC U6 or H1 promoters. Accordingly, the siRNAs targeted against human PLK1  
 CC are valuable antiproliferative agents, and likewise the phosphorochilate  
 CC antisense specific oligonucleotides (ASOs) which hybridise with human  
 CC PLK1 mRNA, inhibit PLK1 expression in tumour cells, such that they can be  
 CC described as having cytosstatic activity. This oligonucleotide sequence is  
 CC the antisense oligo p21 located in the 3' UTR that inhibits expression of  
 CC human PLK1 of the invention.  
 XX  
 SQ Sequence 20 BP; 2 A; 0 C; 15 G; 3 T; 0 U; 0 Other;  
 Query March 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 4750 CCCTTCCTCAGCCCTCCACC 4769  
 ||||| ||||| | |||||

Db 20 CCCTCCCTCAGCCCTCCACC 1  
 RESULT 2670  
 ID AAL61522 standard; DNA; 20 BP.  
 XX  
 AC AAL61522;  
 XX  
 DT 22-SEP-2003 (first entry)  
 XX  
 DE Human inhibitor-kappa B-R antisense oligonucleotide, ISIS #130447.  
 XX  
 KM Human; inhibitor-kappa B-R; I-kappaB; IKK; I-kappa-B-related; NFkBIL2;  
 KM ikappa B; antisense; immune response; infection; inflammation; therapy;  
 KM tumour; prophylaxis; phosphorothioate; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Phosphorothioate backbone; All cytidine residues  
 FT are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 16..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN WO2003042360-A2.  
 XX  
 PD 22-MAY-2003.  
 XX  
 PF 05-NOV-2002; 2002WO-US035597.  
 XX  
 PR 13-NOV-2001; 2001US-00993731.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 PI Monia BP, Watt AT;  
 XX  
 DR WPI; 2003-468635/44.  
 XX  
 PT New antisense oligonucleotides targeted to nucleic acids encoding  
 PT inhibitor-kappa B-R, useful for diagnosing or treating diseases  
 PT associated with expression of inhibitor-kappa B-R, e.g., a heightened  
 PT immune response or infection.  
 XX  
 PS Claim 3; Page 74; 108pp; English.  
 XX  
 CC The invention relates to antisense compounds targeted to a nucleic acid  
 CC molecule encoding human inhibitor-kappa B-R (also known as I-kappaB,  
 CC IKK, I-kappa-B-related, ikappa B, nuclear factor of kappa light  
 CC polypeptide gene enhancer in B-cells inhibitor-like 2 and NFkBIL2) to  
 CC inhibit its expression. Antisense compounds of the invention are useful  
 CC for treating diseases or conditions associated with the expression of  
 CC inhibitor-kappa B-R such as a heightened immune response involving  
 CC increased cytokine expression, or a result of infection (e.g. bacterial,  
 CC viral or parasitic). They are useful for diagnostics, therapeutics,  
 CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour  
 CC formation, as research reagents and kits and in distinguishing between  
 CC functions of various members of a biological pathway. They are also  
 CC useful in antisense therapy. The present sequence is an oligonucleotide  
 CC targeted to human inhibitor-kappa B-R DNA  
 XX  
 SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;

```

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      2690 TGCTCCGAGCCAGGCTG 2709
          |||||
          1 TCCTCAGAGCCAGGCGG 20

RESULT 2671
ACH00564/C
ID ACH00564 standard; DNA; 20 BP.
XX
AC ACH00564;
XX
DT 12-FEB-2004 (first entry)
XX
DE Mammalian inverted nipple associated microsatellite PCR primer #18.
XX
KM Inverted nipple; microsatellite; PCR; primer; ss; pig.
XX
OS Mammalia.
XX
PN WO2003066891-A2.
XX
PD 14-AUG-2003.
XX
PF 03-FEB-2003; 2003WO-EP001045.
XX
PR 05-FEB-2002; 2002EP-00002632.
XX
RA (FOER-) FOERDERVEREIN BIOTECHNOLOGIEFORSCHUNG DE.
XX
PI Hardege T, Schellander K, Wimmers K;
XX
PI WPI; 2003-671539/63.
XX
DR WPI; 2003-671539/63.
XX
PT Determining predisposition to inverted nipples useful e.g. for selecting
PT breeding animals comprises detecting specific microsatellite markers.
XX
PS Disclosure; Page 22; 63pp; German.
XX
XX
CC The present invention relates to the use of a nucleic acid to determine
CC the predisposition of appearance or inheritance of inverted nipples,
CC where the nucleic acid is identical to the region of microsatellites
CC S0200, SW2443, S0097, S0007, SW1301 or S0164 on chromosomes 6, 2, 4, 14,
CC 1 and 3, respectively, in pigs, or homologous positions in the genomes of
CC other mammals. The nucleic acids can be used to select pets, breeding or
CC farm animals that lack inverted nipples, particularly by genomic
CC screening of many related mammals in a population. The present sequence
CC is a PCR primer used in the exemplification of the invention to identify
CC microsatellite markers associated with the inverted nipple phenotype
XX
SQ Sequence 20 BP; 4 A; 2 C; 6 G; 8 T; 0 U; 0 Other;

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      4458 GGAACAACCCAGTCTCAA 4477
          |||||
          20 GGAACAACCCCATTTCAA 1

RESULT 2672
ACH00603
ID ACH00603 standard; DNA; 20 BP.
XX
AC ACH00603;
XX
DT 12-FEB-2004 (first entry)
XX
DE Mammalian inverted nipple associated microsatellite PCR primer #57.

```

```

XX
KM Inverted nipple; microsatellite; PCR; primer; ss; pig.
XX
OS Mammalia.
XX
PN WO2003066891-A2.
XX
PD 14-AUG-2003.
XX
PF 03-FEB-2003; 2003WO-EP001045.
XX
PR 05-FEB-2002; 2002EP-00002632.
XX
RA (FOER-) FOERDERVEREIN BIOTECHNOLOGIEFORSCHUNG DE.
XX
PI Hardege T, Schellander K, Wimmers K;
XX
PI WPI; 2003-671539/63.
XX
DR WPI; 2003-671539/63.
XX
PT Determining predisposition to inverted nipples useful e.g. for selecting
PT breeding animals comprises detecting specific microsatellite markers.
XX
PS Disclosure; Page 23; 63pp; German.
XX
XX
CC The present invention relates to the use of a nucleic acid to determine
CC the predisposition of appearance or inheritance of inverted nipples,
CC where the nucleic acid is identical to the region of microsatellites
CC S0200, SW2443, S0097, S0007, SW1301 or S0164 on chromosomes 6, 2, 4, 14,
CC 1 and 3, respectively, in pigs, or homologous positions in the genomes of
CC other mammals. The nucleic acids can be used to select pets, breeding or
CC farm animals that lack inverted nipples, particularly by genomic
CC screening of many related mammals in a population. The present sequence
CC is a PCR primer used in the exemplification of the invention to identify
CC microsatellite markers associated with the inverted nipple phenotype
XX
SQ Sequence 20 BP; 1 A; 11 C; 0 G; 8 T; 0 U; 0 Other;

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      4753 TCCTCCTCACCTCGACCTCT 4772
          |||||
          1 TCCTCCTTCCTCCATCTCT 20

RESULT 2673
ABX78228/C
ID ABX78228 standard; DNA; 20 BP.
XX
AC ABX78228;
XX
DT 17-APR-2003 (first entry)
XX
DE Human b1functional apoptosis regulator antisense oligo ISIS NO 143759.
XX
KM Human; b1functional apoptosis regulator; antisense; phosphorothioate;
KM cytosolic; antiinflammatory; inhibitor; infection; inflammation; tumour;
KM ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FH modified_base 1..20
FH FT /*tag= a
FH FT /mod_base= OTHER
FH FT /note= "phosphorothioate backbone, nucleotides 1-5 and 16
FH FT -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7
FH FT -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-
FH FT methyl cytosines"
XX
PN US6468796-B1.

```

```

PD 22-OCT-2002.
XX
XX 27-APR-2001; 2001US-00844525.
XX
XX 27-APR-2001; 2001US-00844525.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Walt AT;
XX
XX WPI; 2003-196749/19.
XX
XX New antisense compounds targeted to nucleic acids encoding human
XX bifunctional apoptosis regulator, for modulating expression of the
XX regulator and treating diseases associated with expression of the
XX regulator in humans.
XX
XX Example 15; Col 45-46; 42pp; English.
XX
XX This invention describes a novel compound, 17-50 nucleobases in length
XX which specifically hybridizes with a nucleic acid encoding human
XX bifunctional apoptosis regulator (BAR) and inhibits the expression of
XX human BAR. The products of the invention have cytostatic and
XX antiinflammatory activity and can be used to inhibit human BAR expression
XX during antisense therapy, useful for inhibiting the expression of human
XX BAR in cells or tissues and for treating diseases associated with
XX expression of BAR in an animal, particularly a human suspected of having
XX or being prone to a disease or condition associated with expression of
XX human BAR. In addition the antisense oligonucleotides are useful for
XX diagnostics, therapeutics and as research reagent, e.g. prophylactically
XX to prevent or delay infection, inflammation or tumor formation. The
XX oligonucleotides described in the invention have 2'-methoxyethyl (2'-MOE)
XX wings and a deoxy gap. This sequence represents a human BAR antisense
XX oligonucleotide described in the disclosure of the invention
XX
XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1551 CAAGATGACTGCACTGGGGA 1570
XX Db 20 CAAGAGACAGCTCTGGCGA 1
XX
XX RESULT 2674
XX ABZ92414
XX ID ABZ92414 standard; DNA; 20 BP.
XX
XX AC ABZ92414;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; de.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX

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PA (EPiG-) EPIGENESIS PHARM INC.
XX
XX NYce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAse, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 7656; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pat_sequences
XX
XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 536 AGAAGGAAGCAGGTTTCC 555
XX Db 1 AGCAGGGAAGCAGGTTTCC 20
XX
XX RESULT 2675
XX ABZ87961/c
XX ID ABZ87961 standard; DNA; 20 BP.
XX
XX AC ABZ87961;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; de.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX

```



PA (EPIC-) EPIGENESIS PHARM INC.  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Claim 15; SEQ ID NO 1316; 872bp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 1 A; 9 C; 6 G; 4 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
Qy 169 TGCTGGCGCTGCTGCTGCTG 188  
Db 1 TGCCACCGCGCTGCTGCTG 20  
XX  
RESULT 2678  
ABZ98591/c  
ID ABZ98591 standard; DNA; 20 BP.  
XX  
AC ABZ98591;  
XX  
XX 17-OCT-2003 (first entry)  
DT  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; de.  
XX  
OS Homo sapiens.  
XX  
XX WO200285308-A2.  
PN  
XX  
XX 31-OCT-2002.  
PD  
XX  
XX 23-APR-2002; 2002MO-US013135.  
PF  
XX  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX

PA (EPIC-) EPIGENESIS PHARM INC.  
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
XX WPI; 2003-229219/22.  
DR  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
PS Disclosure; SEQ ID NO 13833; 872bp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 5 A; 7 C; 8 G; 0 T; 0 U; 0 Other;  
XX  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
XX  
Qy 160 TGCTGGCGCTGCTGCTGCTG 179  
Db 20 TGCTGGCGCTGCTGCTGCTG 1  
XX  
RESULT 2679  
ABZ87426  
ID ABZ87426 standard; DNA; 20 BP.  
XX  
AC ABZ87426;  
XX  
XX 17-OCT-2003 (first entry)  
DT  
XX  
DE Human oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
KW lung inflammation; respiratory disease; de.  
XX  
OS Homo sapiens.  
XX  
XX WO200285308-A2.  
PN  
XX  
XX 31-OCT-2002.  
PD  
XX  
XX 23-APR-2002; 2002MO-US013135.  
PF  
XX  
XX 24-APR-2001; 2001US-0286137P.  
PR  
XX

PA (EPIC-) EPIGENESIS PHARM INC.  
 XX  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 PS Disclosure; SEQ ID NO 2668; 872bp; English.  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 9 A; 4 C; 1 G; 6 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 2413 TTAAGATTGGAATCCAA 2432  
 Db 1 TCAAGTTTCAATCCAA 20  
 XX  
 RESULT 2680  
 ABZ86072  
 ID ABZ86072 standard; DNA; 20 BP.  
 XX  
 AC ABZ86072;  
 XX  
 DT 17-OCT-2003 (first entry)  
 XX  
 DE Human oligonucleotide sequence.  
 XX  
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
 KW lung inflammation; respiratory disease; de.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285308-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013135.  
 XX  
 PR 24-APR-2001; 2001US-0286137P.  
 XX

PA (EPIC-) EPIGENESIS PHARM INC.  
 XX  
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 XX  
 DR WPI; 2003-229219/22.  
 XX  
 PT Pharmaceutical composition for treating ailments associated with impaired  
 PT respiration, has oligo(s) antisense to specific gene(s) or its  
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
 PT ubiquinone.  
 XX  
 PS Claim 15; SEQ ID NO 1314; 872bp; English.  
 XX  
 CC The invention relates to a novel pharmaceutical composition, which has a  
 CC first active agent comprising an oligonucleotide antisense to the  
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
 CC junctions of genes encoding a polypeptide associated with lung and/or  
 CC nasal airway dysfunction and a second active agent comprising an  
 CC antiinflammatory steroid and ubiquinone. A composition of the invention  
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
 CC immunosuppressive, and cytostatic activity. The composition may have a  
 CC use in antisense gene therapy. The composition is useful for treating or  
 CC preventing a respiratory, lung or malignant disease or condition, also  
 CC for enhancing the prophylactic or therapeutic respiratory effect of an  
 CC antiinflammatory steroid in a subject, for reducing or depleting levels  
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
 CC lung inflammation, lung allergies, or a respiratory disease or condition.  
 CC Note: The sequence data for this patent is not represented in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences  
 XX  
 SQ Sequence 20 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 178 TGCTGCTGCTGCTGCGG 197  
 Db 1 TGCTGCTGCTGCTGCGCACG 20  
 XX  
 RESULT 2681  
 ADA26857/C  
 ID ADA26857 standard; DNA; 20 BP.  
 XX  
 AC ADA26857;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Human H2.0-like homeobox 1 reverse PCR primer #141.  
 XX  
 KW Metastasis; neoplastic growth; detection; prediction;  
 KW neoplastic growth marker; drug screening; cancer; tumor;  
 KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;  
 KW drug targeting; human; cytostatic; reverse transcription-PCR; RT-PCR;  
 KW primer; 85.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003031930-A2.  
 XX  
 PD 17-APR-2003.  
 XX  
 PF 02-OCT-2002; 2002WO-US031247.  
 XX  
 PR 09-OCT-2001; 2001US-0327332P.  
 XX  
 PA (UWJO ) UNIV JOHNS HOPKINS.

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XX  Vogelstein B, Kinzler KW, Saha S, Bardelli A;
PI
XX
XX  WPI; 2003-393457/37.
DR
XX
XX  Identifying regions of neoplastic growth in a human body, useful for
PT detecting or predicting metastasis, comprises administering to the human
PT body an antibody or peptide that specifically binds to a protein marker
PT of neoplastic growth.
XX
XX  Example 2; Page 22; 42pp; English.
PS
XX
XX  The invention relates to methods for identifying regions of neoplastic
CC growth in a human patient, especially for detecting or predicting
CC metastasis. The methods involve determining whether a neoplastic growth
CC marker protein is overexpressed, either by the use of an antibody
CC specific for the protein, or by the use of PCR or hybridisation to detect
CC nucleic acids encoding the marker proteins. A set of neoplastic growth
CC markers are disclosed (SAGE (serial analysis of gene expression) tags for
CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase
CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic
CC growth marker. The neoplastic growth markers are specifically expressed
CC at a higher level in metastatic cancers, compared with advanced and early
CC stage cancers and normal cells from which the cancer is derived.
CC Overexpression of the neoplastic growth markers is taken as an indication
CC that the tissue has a propensity to metastasise. The invention also
CC encompasses methods for treating a patient with an advanced or metastatic
CC cancer, and for identifying candidate drugs for treating advanced or
CC metastatic cancers. The methods of the invention are useful for
CC identifying regions of neoplastic growth, for detecting or predicting
CC metastasis, or identifying candidate drugs for treating advanced or
CC metastatic cancers. The invention is particularly applicable to
CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies
CC which bind to the neoplastic growth marker proteins are additionally
CC useful for diagnostic imaging and for targeting cytotoxic or
CC chemotherapeutic drugs. The present sequence represents a reverse
CC transcription-PCR (RT-PCR) primer used to study the upregulation of
CC neoplastic growth marker genes in an example of the invention.
XX
XX  Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
SQ
XX
XX  Query Match          0.1%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY
XX      1738 AAGACAAAGACCAAGAGGTT 1757
XX      |||||
XX      20 AGGACAAAGACCAAGAGGCT 1
Db
XX
XX  RESULT 2682
XX  ACC42425
XX  ACC42425 standard; DNA; 20 BP.
XX
XX  AC  ACC42425;
XX
XX  26-AUG-2003 (first entry)
XX
XX  ACY1 CoA cholesterol acyltransferase-2 antisense oligo ISIS #140160.
XX
XX  ACY1 CoA cholesterol acyltransferase-2; antisense therapy; antilipemic;
XX  antiarteriosclerotic; cardiovascular; ACAT-2; lipid metabolism;
XX  cholesterol metabolism; atherosclerosis; cardiovascular disease;
XX  phosphorothioate; human; ss.
XX
XX  OS  Synthetic.
XX
XX  Key      Location/Qualifiers
XX  modified_base 1..20
XX  /*tag= a
XX  /mod_base= OTHER
XX  /note= "Oligonucleotide has phosphorothioate backbone and
XX  all cytidine nucleotides are 5-methylcytidine. Optionally

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FT  some nucleotides with 2'-methoxyethyl (2'-MOE wings)
FT  modification".
XX
XX  WO2003011889-A2.
XX
XX  13-FEB-2003.
XX
XX  15-JUL-2002; 2002WO-US022746.
XX
XX  30-JUL-2001; 2001US-00918026.
XX
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Crooke RM, Graham MJ, Lemonidis KM;
PI
XX
XX  WPI; 2003-248145/24.
DR
XX
XX  New antisense oligonucleotides for modulating acyl CoA cholesterol
PT acyltransferase-2, e.g. for preventing or treating diseases associated
PT with abnormal lipid or cholesterol metabolism, atherosclerosis,
PT cardiovascular disease.
XX
XX  Claim 3; Page 89; 112pp; English.
PS
XX
XX  The present invention relates to novel antisense oligonucleotides which
CC are targeted to human acyl CoA cholesterol acyltransferase-2 (ACAT-2)
CC nucleotide sequence (ACC42409-ACC42431), and mouse ACAT-2 (ACC42432-
CC ACC42457). The antisense oligonucleotides specifically hybridise with and
CC inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and
CC ACC42402). ACAT enzymes catalyse the synthesis of cholesterol esters from
CC free cholesterol and fatty acyl-CoA. The antisense oligonucleotides are
CC useful for treating an animal which has a disease or condition associated
CC with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a
CC condition involving abnormal cholesterol metabolism, atherosclerosis, or
CC cardiovascular disease
XX
XX  Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
SQ
XX
XX  Query Match          0.1%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY
XX      2209 GAAGAGCTTGAGCCACA 2228
XX      |||||
XX      1 GCAGAGCGCTTGAGCCAGCA 20
Db
XX
XX  RESULT 2683
XX  ADK17585
XX  ADK17585 standard; DNA; 20 BP.
XX
XX  AC  ADK17585;
XX
XX  06-MAY-2004 (first entry)
XX
XX  Transposon plasmid I site specific mutagenic primer #58.
XX
XX  transposon; transposase; inverted repeat; hepatotropic; haemostatic;
XX  antimicrobial; cytostatic; gene therapy; liver disease; haemophilia;
XX  Crigler-Najjar syndrome; ornithine transcarbamylase deficiency;
XX  pulmonary disease; hyperoxia; cystic fibrosis; emphysema;
XX  pulmonary edema; infectious disease; alpha-1-antitrypsin deficiency;
XX  lung cancer; Sleeping Beauty; Sb, Ie-1 like; salmonid; fish; mutagenic;
XX  primer; ss.
XX
XX  OS  Synthetic.
XX
XX  Key      Location/Qualifiers
XX  modified_base 1..20
XX  /mod_base= OTHER
XX  /note= "Oligonucleotide has phosphorothioate backbone and
XX  all cytidine nucleotides are 5-methylcytidine. Optionally

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PR 22-APR-2002; 2002US-00128998.
PR 10-MAY-2002; 2002US-0379572P.
XX
XX (MINU) UNIV MINNESOTA.
XX
XX Hackett PB, Clark KJ, Cui Z, Dupuy AJ, Geurts AM, Liu G;
XX WPI; 2003-854116/79.
XX
XX New polynucleotide having a nucleic acid sequence flanked by first and
XX second inverted repeats, and transposing from a donor to a target
XX polynucleotide, useful for treating and/or preventing liver and pulmonary
XX diseases.
XX
XX Example 1; Page 35; 135pp; English.
XX
XX The invention relates to improved transposons and transposases and
XX methods of their use. The invention further relates to a novel
XX polynucleotide, or its complement, comprising a nucleic acid sequence
XX flanked by first and second inverted repeats, where the polynucleotide
XX transposes from a donor polynucleotide to a target polynucleotide at a
XX frequency at least 50% greater than the frequency of transposition of a
XX transposon comprising nucleotides 2664 to 4901 of a fully defined
XX sequence of 4928 bp, as given in the specification. The compositions
XX including the transposons and transposases have the following activities:
XX hepatotropic, haemostatic, antimicrobial, and cytostatic. In compositions
XX of the invention may be used in gene therapy to treat disorders. The
XX method and compositions of the present invention are useful for treating
XX and/or preventing liver diseases such as haemophilia, Crigler-Najjar
XX syndrome and ornithine transcarbamylase deficiency, and pulmonary
XX diseases such as hyperoxia, cystic fibrosis, emphysema, pulmonary edema,
XX infectious diseases, alpha-1-antitrypsin deficiency and lung cancer. This
XX polynucleotide sequence represents a mutagenic primer of the plasmid
XX containing a synthetic transposase named Sleeping Beauty (SB). The
XX synthetic Tc-1 like transposon system was reconstructed from sequences
XX found in salmonid fish.
XX
XX Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3829 TGAGCTCATGCGCTTCAGAG 3848
DB 1 TGATGTCATGCGCTTTAGAG 20
RESULT 2684
ADK17588
ID ADK17588 standard; DNA; 20 BP.
XX
XX ADK17588;
AC
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Transposon plasmid I site specific mutagenic primer #61.
DE
XX
XX transposon; transposase; inverted repeat; hepatotropic; haemostatic;
XX antimicrobial; cytostatic; gene therapy; liver disease; haemophilia;
XX Crigler-Najjar syndrome; ornithine transcarbamylase deficiency;
XX pulmonary disease; hyperoxia; cystic fibrosis; emphysema;
XX pulmonary edema; infectious disease; alpha-1-antitrypsin deficiency;
XX lung cancer; Sleeping Beauty; SB; Tc-1 like; salmonid; fish; mutagenic;
XX primer; ss.
XX
XX Synthetic.
OS
XX
XX WO2003089618-A2.
XX
XX 30-OCT-2003.
XX
XX 22-APR-2003; 2003WO-US012531.

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XX
XX 22-APR-2002; 2002US-00128998.
XX 10-MAY-2002; 2002US-0379572P.
XX
XX (MINU) UNIV MINNESOTA.
XX
XX Hackett PB, Clark KJ, Cui Z, Dupuy AJ, Geurts AM, Liu G;
XX WPI; 2003-854116/79.
XX
XX New polynucleotide having a nucleic acid sequence flanked by first and
XX second inverted repeats, and transposing from a donor to a target
XX polynucleotide, useful for treating and/or preventing liver and pulmonary
XX diseases.
XX
XX Example 1; Page 35; 135pp; English.
XX
XX The invention relates to improved transposons and transposases and
XX methods of their use. The invention further relates to a novel
XX polynucleotide, or its complement, comprising a nucleic acid sequence
XX flanked by first and second inverted repeats, where the polynucleotide
XX transposes from a donor polynucleotide to a target polynucleotide at a
XX frequency at least 50% greater than the frequency of transposition of a
XX transposon comprising nucleotides 2664 to 4901 of a fully defined
XX sequence of 4928 bp, as given in the specification. The compositions
XX including the transposons and transposases have the following activities:
XX hepatotropic, haemostatic, antimicrobial, and cytostatic. Th compositions
XX of the invention may be used in gene therapy to treat disorders. The
XX method and compositions of the present invention are useful for treating
XX and/or preventing liver diseases such as haemophilia, Crigler-Najjar
XX syndrome and ornithine transcarbamylase deficiency, and pulmonary
XX diseases such as hyperoxia, cystic fibrosis, emphysema, pulmonary
XX infectious diseases, alpha-1-antitrypsin deficiency and lung cancer. This
XX polynucleotide sequence represents a mutagenic primer of the plasmid
XX containing a synthetic transposase named Sleeping Beauty (SB). The
XX synthetic Tc-1 like transposon system was reconstructed from sequences
XX found in salmonid fish.
XX
XX Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3829 TGAGCTCATGCGCTTCAGAG 3848
DB 1 TGATGTCATGCGCTTTAGAG 20
RESULT 2685
ADK17587
ID ADK17587 standard; DNA; 20 BP.
XX
XX ADK17587;
AC
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Transposon plasmid I site specific mutagenic primer #60.
DE
XX
XX transposon; transposase; inverted repeat; hepatotropic; haemostatic;
XX antimicrobial; cytostatic; gene therapy; liver disease; haemophilia;
XX Crigler-Najjar syndrome; ornithine transcarbamylase deficiency;
XX pulmonary disease; hyperoxia; cystic fibrosis; emphysema;
XX pulmonary edema; infectious disease; alpha-1-antitrypsin deficiency;
XX lung cancer; Sleeping Beauty; SB; Tc-1 like; salmonid; fish; mutagenic;
XX primer; ss.
XX
XX Synthetic.
OS
XX
XX WO2003089618-A2.
XX
XX 30-OCT-2003.
XX
XX

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PF 22-APR-2003; 2003WO-US012531.  
XX  
XX 22-APR-2002; 2002US-00128998.  
PR 10-MAY-2002; 2002US-0379572P.  
XX  
XX (MINU) UNIV MINNESOTA.  
XX  
XX Hackett PB, Clark KJ, Cui Z, Dupuy AJ, Geurts AM, Liu G;  
XX WPI; 2003-854116/79.  
XX  
XX  
XX New polynucleotide having a nucleic acid sequence flanked by first and  
PT second inverted repeats, and transposing from a donor to a target  
PT polynucleotide, useful for treating and/or preventing liver and pulmonary  
PT diseases.  
XX  
XX Example 1; Page 35, 135pp; English.  
XX  
XX The invention relates to improved transposons and transposases and  
CC methods of their use. The invention further relates to a novel  
CC polynucleotide, or its complement, comprising a nucleic acid sequence  
CC flanked by first and second inverted repeats, where the polynucleotide  
CC transposes from a donor polynucleotide to a target polynucleotide at a  
CC frequency at least 50% greater than the frequency of transposition of a  
CC transposon comprising nucleotides 2664 to 4901 of a fully defined  
CC sequence of 4928 bp, as given in the specification. The compositions  
CC including the transposons and transposases have the following activities:  
CC hepatotropic, haemostatic, antimicrobial, and cytostatic. The compositions  
CC of the invention may be used in gene therapy to treat disorders. The  
CC methods and compositions of the present invention are useful for treating  
CC and/or preventing liver diseases such as haemophilia, Crigler-Najjar  
CC syndrome and ornithine transcarbamylase deficiency, and pulmonary  
CC infectious diseases, alpha-1-antitrypsin deficiency and lung cancer. This  
CC polynucleotide sequence represents a mutagenic primer of the plasmid  
CC containing a synthetic transposase named Sleeping Beauty (SB). The  
CC synthetic TC-1 like transposon system was reconstructed from sequences  
CC found in salmonid fish.  
XX  
XX Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 3829 TGAGCTCATGCGCTTCAGAG 3848  
DB 1 TGATGTCATGCGCTTAGAG 20  
RESULT 2686  
ABD24191/c  
XX ABD24191 standard; DNA; 20 BP.  
XX  
XX ABD24191;  
AC  
XX 29-JUL-2004 (first entry)  
DT  
XX  
XX Human calmodulin 2-derived oligonucleotide SEQ ID 3203.  
DE  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiasthmatic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.  
XX  
XX Homo sapiens.  
OS  
XX  
XX MO200285309-A2.  
XX  
XX

PD 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
PF  
XX  
XX 24-APR-2001; 2001US-0286036P.  
PR  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahbuddin S;  
PI WPI; 2003-093058/08.  
XX  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX  
XX  
XX Claim 15; SEQ ID NO 3203; 763pp; English.  
PS  
XX  
XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
XX Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 3970 GCGATGCGCGGTCAAAATAT 3989  
DB 20 GAGATGCGCGGTCAATAT 1  
RESULT 2687  
ABD28644  
XX ABD28644 standard; DNA; 20 BP.  
XX  
XX ABD28644;  
AC  
XX 29-JUL-2004 (first entry)  
DT  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
DE  
XX  
XX T64626-derived oligonucleotide SEQ ID 7656.  
XX  
XX

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 DR MPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 7656; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC transplantation rejection, chronic obstructive pulmonary disease, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 85.0%; Score 15.2; DB 1; Length 20;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 536 AGAAGGAAACAGCTTTCC 555

DB 1 AGCAGGGAAGAGTTTCC 20

RESULT 2688

ABD27859/C

ID ABD27859 standard; DNA, 20 BP.

XX ABD27859;

XX 29-JUL-2004 (first entry)

XX AA258396-derived oligonucleotide SEQ ID 6871.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 DR MPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 6871; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hyperextension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, chronic obstructive pulmonary disease, pulmonary  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it  
 XX Sequence 20 BP; 9 A; 2 C; 2 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 4008 TTGAAATGAGATTCCTT 4027  
 Db 20 TTGAAATGAGATTCCTT 1

RESULT 2689  
 ABD22304  
 ID ABD22304 standard; DNA; 20 BP.  
 AC ABD22304;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX

Human stemlocalcin-derived oligo SEQ ID 1316.  
 XX  
 DE Human; antiense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyrostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002MO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIC-) EPIGENESIS PHARM INC.  
 XX

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PT WPI; 2003-093058/08.  
 XX

Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX

Claim 15; SEQ ID NO 1316; 763bp; English.

This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cyrostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 XX

SQ Sequence 20 BP; 1 A; 9 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 169 TGGCTGCGCTGCTGCTG 188  
 Db 1 TGGCACC GCCGCTGCTG 20

RESULT 2690  
 ABD22302  
 ID ABD22302 standard; DNA; 20 BP.  
 XX  
 AC ABD22302;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX

Human stemlocalcin-derived oligo SEQ ID 1314.  
 XX  
 DE Human; antiense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cyrostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX

OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002MO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX

(EPIC-) EPIGENESIS PHARM INC.  
 XX

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahabuddin S;  
 PT WPI; 2003-093058/08.  
 XX

Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX

Claim 15; SEQ ID NO 1314; 763bp; English.

This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The

oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The inflammatory, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 1 A; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 178 TGCTGCTGCTGCTGCTGCG 197  
1 TGCTGCTGCTGCTGCTGCG 20

RESULT 2691

ABD3656 standard; DNA; 20 BP.

AC ABD3656;

XX 29-JUL-2004 (first entry)

DE Human myosin X-derived oligonucleotide SEQ ID 2668.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002MO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPICGENESIS PHARM INC.

XX Myce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

PS Claim 15; SEQ ID NO 2668; 763bp; English.

XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX inflammatory, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX inflammation, allergies, asthma, impeded respiration, respiratory  
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
XX transplantation rejection, pulmonary infections, bronchitis or cancer.  
XX The reduced adenosine content of the anti-sense oligos corresponding to  
XX thymidines present in the target RNA serves to prevent the breakdown of  
XX the oligonucleotides into products that free adenosine into the system  
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
XX prevent any unwanted effects due to it

Sequence 20 BP; 9 A; 4 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 2413 TTAAGATTGGAATCCANA 2432  
1 TCAAGTTTCAATCCANA 20

RESULT 2692

ABD31622/c standard; DNA; 20 BP.

AC ABD31622;

XX 29-JUL-2004 (first entry)

DE Human Trypase a-derived oligonucleotide SEQ ID 13833.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.  
 PF  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIC-) EPIGENESIS PHARM INC.  
 PI NYce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 XX WPI; 2003-093058/08.  
 DR  
 XX  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to  
 PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 XX  
 PS Claim 15; SEQ ID NO 13833; 763bp; English.  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 CC  
 XX  
 SQ Sequence 20 BP; 5 A; 7 C; 8 G; 0 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 160 TGCTGGCGCTGCTGCTGCTG 179  
 Db 20 TGCTGGCGCTGCTGCTGCTG 1  
 RESULT 2693  
 ADG88532  
 ID ADG88532 standard; DNA; 20 BP.  
 XX  
 AC ADG88532;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Bacillus thuringiensis WAR gene amplifying primer. S2-995R.  
 XX  
 XX Pesticide; genetic engineering; resistance; toxin; insecticide;  
 KM plant protectant; PCR; primer; de.

XX  
 OS Bacillus thuringiensis.  
 XX  
 PN US6603063-B1.  
 XX  
 PD 05-AUG-2003.  
 XX  
 PF 07-MAY-1999; 99US-00307106.  
 XX  
 PR 07-MAY-1999; 99US-00307106.  
 XX  
 PA (MYCO ) MYCOGEN CORP.  
 PI Feltelson JS, Schmepe HE, Narva KE, Stockhoff BA, Schmeits J;  
 PI Iowen D, Dullum CJ, Muller-Cohn J, Stamp L, Morrill G;  
 PI Finstad-Lee S;  
 XX WPI; 2004-008371/01.  
 DR  
 XX  
 PT New polynucleotide from Bacillus subtilis, which encodes delta endotoxins  
 PT or pesticidal proteins, useful in plant genetic engineering, particularly  
 PT for producing plants that are resistant to lepidopteran or coleopteran  
 PT pests.  
 XX  
 PS Example 5; SEQ ID NO 42; 51bp; English.  
 CC  
 CC The present invention provides an isolated polynucleotide from Bacillus  
 CC thuringiensis (B.c.) strain KB59A-6 that encodes an active pesticidal  
 CC SVP toxin protein. The invention is useful in plant genetic engineering  
 CC particularly producing plants that express such gene in order to  
 CC effectively control various insects e.g. boll weevil, black cutworm etc.  
 CC The invention is also useful for conferring resistance in plants against  
 CC lepidopteran or coleopteran. The present sequence is a PCR primer used  
 CC to amplify Bacillus thuringiensis WAR gene.  
 XX  
 SQ Sequence 20 BP; 9 A; 5 C; 2 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 4806 TCCCTAAGATGAGACTA 4825  
 Db 1 TCCCTAAGCATCAGAAATA 20  
 RESULT 2694  
 ADH18829/C  
 ID ADH18829 standard; DNA; 20 BP.  
 XX  
 AC ADH18829;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to rabbit Apob DNA - SEQ ID 818.  
 XX  
 DE apolipoprotein B; Apob; antiarteriosclerotic; cardiant; antidiabetic;  
 KM anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KM diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KM antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KM human; ss.  
 XX  
 XX Oryctolagus cuniculus.  
 OS  
 OS WO2003097662-A1.  
 PN  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 XX 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX

PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI, 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Example 42; SEQ ID NO 818; 405pp; English.  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiatic, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 CC  
 SO Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Oy 4920 CTGGCTTCTGATATACAGGC 4939  
 Db 20 CTACGCTGCTGATACAGGC 1  
 XX  
 RESULT 2695  
 ADH18828/c  
 ID ADH18828 standard; DNA; 20 BP.  
 XX  
 AC ADH18828;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to rabbit ApoB DNA - SEQ ID 817.  
 XX  
 KM apolipoprotein B; ApoB; antiarteriosclerotic; cardiatic; antidiabetic;  
 KM anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KM diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KM antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KM human; ss.  
 XX  
 OS Oryctolagus cuniculus.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI, 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX

PS Example 42; SEQ ID NO 817; 405pp; English.  
 XX  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiatic, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy  
 CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
 CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
 CC phosphorothioate backbone throughout and in which all cytidine residues  
 CC are 5-methylcytidines.  
 CC  
 SO Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Oy 4911 AATGCACTGCTGCTCTGA 4930  
 Db 20 AATGCACTGCTGCTCTGA 1  
 XX  
 RESULT 2696  
 ADH18825/c  
 ID ADH18825 standard; DNA; 20 BP.  
 XX  
 AC ADH18825;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE 2'-MOE gapmer antisense oligo targeted to rabbit ApoB DNA - SEQ ID 814.  
 XX  
 KM apolipoprotein B; ApoB; antiarteriosclerotic; cardiatic; antidiabetic;  
 KM anorectic; lipid; cholesterol metabolism; atherosclerosis;  
 KM diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;  
 KM antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;  
 KM human; ss.  
 XX  
 OS Oryctolagus cuniculus.  
 XX  
 PN WO2003097662-A1.  
 XX  
 PD 27-NOV-2003.  
 XX  
 PF 15-MAY-2003; 2003WO-US015493.  
 XX  
 PR 15-MAY-2002; 2002US-00147196.  
 PR 13-NOV-2002; 2002US-0426324P.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke RM, Graham MJ;  
 XX  
 DR WPI, 2004-022840/02.  
 XX  
 PT New antisense compound, useful for preparing a composition for treating  
 PT abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type  
 PT 2, obesity, hyperlipidaemia or cardiovascular disease.  
 XX  
 PS Example 42; SEQ ID NO 814; 405pp; English.  
 CC The invention relates to a novel antisense compound targeted to a nucleic  
 CC acid molecule encoding human apolipoprotein B (ApoB) which specifically  
 CC hybridises with and inhibits the expression of human apolipoprotein B.  
 CC The compound of the invention demonstrates antiarteriosclerotic,  
 CC cardiatic, antidiabetic and anorectic activities and may be useful for  
 CC preparing a composition for treating abnormal lipid or cholesterol  
 CC metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or  
 CC cardiovascular disease. Furthermore, the compound has gene therapy

CC applications. The current sequence is that of the 2'-O-methoxyethyl (2'-  
CC MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a  
CC phosphorothioate backbone throughout and in which all cytidine residues  
CC are 5-methylcytidines.

CC Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

DB 4890 GATATGACTTCTCTAACA 4909  
20 GATCTTACTTCTCAAGCA 1

RESULT 2697  
ADH67063/c  
ID ADH67063 standard; DNA; 20 BP.

AC ADH67063;

DT 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #3897.

CC antisense oligonucleotide; glucocorticoid receptor; infection;

KW inflammation; tumour formation; diabetes; obesity;

KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.

XX WO2003099215-A2.

XX 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA ) PHARMACIA CORP.

XX Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 3897; 985bp; English.

CC The invention comprises an antisense oligonucleotide that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotide of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity, The  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

CC Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2705 GGCTGAGTAAACTGGAAG 2724  
20 GGCTGAGTAACTGGAAG 1

RESULT 2698  
ADH67457/c  
ID ADH67457 standard; DNA; 20 BP.

AC ADH67457;

DT 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #4291.

CC antisense oligonucleotide; glucocorticoid receptor; infection;

KW inflammation; tumour formation; diabetes; obesity;

KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.

XX WO2003099215-A2.

XX 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA ) PHARMACIA CORP.

XX Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding  
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 4291; 985bp; English.

CC The invention comprises an antisense oligonucleotide that are targeted  
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
CC antisense oligonucleotide of the invention are useful for preventing or  
CC delaying infection, inflammation or tumour formation. The antisense  
CC oligonucleotides are also useful for treating diabetes, obesity, The  
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
CC present DNA sequence represents an antisense oligonucleotide that targets  
CC the human glucocorticoid receptor gene. NOTE: The present sequence  
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

CC Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2704 AGGCTGAGTAAACTGGA 2723  
20 AGGCTGAGTAACTGGA 1

RESULT 2699  
AD129985/c  
ID AD129985 standard; DNA; 20 BP.

AC AD129985;

DT 22-APR-2004 (first entry)

DE Human dual specific phosphatase 4 DNA, antisense oligonucleotide #5.

KW Antisense therapy; human; dual specific phosphatase 4;

KW hyperproliferative disorder; developmental disorder; apoptosis;  
KW cytosolic; phosphorothioate; ss.



```

OS Homo sapiens.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2003232441-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00174460.
XX
XX 17-JUN-2002; 2002US-00174460.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Bennett CF, Dobie KW;
XX
XX WPI; 2004-061286/06.
XX
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding dual specific phosphatase 4, useful for treating
XX cancer, developmental disorder or a condition arising from aberrant
XX apoptosis.
XX
XX Example 15; SEQ ID NO 18; 61pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding dual specific phosphatase 4. The antisense compound
XX comprises an antisense oligonucleotide that specifically hybridizes with
XX the nucleic acid and inhibits the expression of dual specific phosphatase
XX 4. The antisense oligonucleotide is a chimeric oligonucleotide. The
XX antisense oligonucleotide comprises at least one modified internucleoside
XX linkage, preferably a phosphorothioate linkage. It also comprises at
XX least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
XX sugar moiety. The antisense oligonucleotide further comprises at least
XX one modified nucleobase, preferably a 5-methylcytosine. The antisense
XX oligonucleotides are useful for the treatment of diseases such as
XX hyperproliferative disorders, developmental disorders, and diseases
XX associated with aberrant apoptosis. The present sequence represents an
XX antisense oligonucleotide used in the examples of the present invention.
XX
XX Sequence 20 BP; 4 A; 10 C; 5 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 152 GCTGGCGCTGCTGCGCTGC 171
XX |||||
XX 20 GCTGGCTGCTGCGCGCTGC 1
XX
XX RESULT 2700
XX ADH77268/c
XX ID ADH77268 standard; DNA; 20 BP.
XX
XX ADH77268;
XX
XX 22-APR-2004 (first entry)
XX
XX Human PAZ/PIWI domain-containing protein oligo seqid 158.
XX
XX cytosstatic; PAZ/PIWI domain-containing protein inhibitor;
XX PAZ/PIWI domain-containing protein; hyperproliferative disorder; cancer;
XX aberrant cellular differentiation; human;
XX PAZ/PIWI domain-containing protein; antisense technology;
XX antisense oligonucleotide; ss.
XX

```

```

XX
XX Homo sapiens.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
XX
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX modified_base 15..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
XX US2003232442-A1.
XX
XX 18-DEC-2003.
XX
XX 17-JUN-2002; 2002US-00175492.
XX
XX 17-JUN-2002; 2002US-00175492.
XX
XX 17-JUN-2002; 2002US-00175492.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-052174/05.
XX
XX
XX New antisense oligonucleotide targeted to a nucleic acid encoding a
XX PAZ/PIWI domain-containing protein, useful for treating cancer or a
XX disease arising from aberrant cellular differentiation.
XX
XX Example 15; SEQ ID NO 158; 119pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridizes with a nucleic acid molecule
XX encoding a PAZ/PIWI domain-containing protein. The compound
XX expression of a PAZ/PIWI domain-containing protein. The compound
XX association and methods are useful for treating a disease or condition
XX associated with PAZ/PIWI domain-containing protein, such as a
XX hyperproliferative disorder e.g. cancer, or a disease or condition
XX arising from aberrant cellular differentiation. They are also useful in
XX research and diagnostics for modulating the expression of PAZ/PIWI domain
XX containing protein. This sequence represents a human PAZ/PIWI domain-
XX containing protein antisense oligonucleotide.
XX
XX Sequence 20 BP; 2 A; 3 C; 7 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 2121 AACTACCTTCCTTAAGAAAG 2140
XX |||||
XX 20 AACCACTTCCTTAAGAAAG 1
XX
XX RESULT 2701
XX ADH77193
XX ID ADH77193 standard; DNA; 20 BP.
XX
XX ADH77193;
XX
XX 22-APR-2004 (first entry)
XX
XX Human PAZ/PIWI domain-containing protein oligo seqid 83.
XX
XX cytosstatic; PAZ/PIWI domain-containing protein inhibitor;
XX PAZ/PIWI domain-containing protein; hyperproliferative disorder; cancer;
XX

```

KW aberrant cellular differentiation; human;  
 KW PAZ/PIWI domain-containing protein; antisense technology;  
 KW antisense oligonucleotide; ss.  
 OS Homo sapiens.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= Phosphorothioate backbone. All cytidine  
 residues are 5-methylcytidines"  
 FT modified\_base 1..5  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-methoxyethyl (2'-MOE) nucleotides"  
 FT modified\_base 15..20  
 FT /\*tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-O-methoxyethyl (2'-MOE) nucleotides"  
 XX  
 PN US2003232442-A1.  
 XX  
 PD 18-DEC-2003.  
 XX  
 PF 17-JUN-2002; 2002US-00175492.  
 XX  
 PR 17-JUN-2002; 2002US-00175492.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Dobie KW;  
 XX  
 DR WPI; 2004-052174/05.  
 XX  
 PT New antisense oligonucleotide targeted to a nucleic acid encoding a  
 PT PAZ/PIWI domain-containing protein, useful for treating cancer or a  
 PT disease arising from aberrant cellular differentiation.  
 XX  
 PS Example 15; SEQ ID NO 83; 119pp; English.  
 XX  
 CC The invention describes a compound 8-80 nucleobases in length targeted  
 CC to, and which specifically hybridises with a nucleic acid molecule  
 CC encoding a PAZ/PIWI domain-containing protein, and inhibits the  
 CC expression of a PAZ/PIWI domain-containing protein. The compound,  
 CC composition and methods are useful for treating a disease or condition  
 CC associated with PAZ/PIWI domain-containing protein, such as a  
 CC hyperproliferative disorder e.g. cancer, or a disease or condition  
 CC arising from aberrant cellular differentiation. They are also useful in  
 CC research and diagnostics for modulating the expression of PAZ/PIWI domain-  
 CC -containing protein. This sequence represents a human PAZ/PIWI domain-  
 CC containing protein antisense oligonucleotide.  
 CC  
 SQ Sequence 20 BP; 8 A; 7 C; 3 G; 2 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 DB 2121 AACTACCTCTAAGAAG 2140  
 1 AACCACTCCTAAGAAG 20  
 XX  
 RESULT 2702  
 AD18958/c  
 ID AD18958 standard; DNA; 20 BP.  
 XX  
 AC AD18958;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE HIV-I gag2 gene amplifying primer #7.

XX  
 KW Human immune deficiency virus; HIV-1; drug-resistance; primer; ss.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN US2003228574-A1.  
 XX  
 PD 11-DEC-2003.  
 XX  
 PF 28-APR-2003; 2003US-00425975.  
 XX  
 PR 01-SEP-2000; 2000US-0229790P.  
 PR 31-AUG-2001; 2001US-00944036.  
 XX  
 PA (YANG/) YANG Y Y.  
 PA (BREN/) BRENTANO S T.  
 PA (BABO/) BABOLA O.  
 PA (TRAN/) TRAN N.  
 PA (VERN/) VERNET G.  
 XX  
 PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;  
 XX  
 DR WPI; 2004-060998/06.  
 XX  
 PT New nucleic acid oligomer for amplifying and detecting HIV-1 nucleotide  
 PT sequences and in providing information about the infective agent, e.g.  
 PT genetic subgroup or drug-resistance phenotype based on detectable  
 PT sequence information.  
 XX  
 PS Claim 1; SEQ ID NO 49; 39pp; English.  
 XX  
 CC The present invention relates to a nucleic acid oligomer for amplifying a  
 CC nucleotide sequence of human immune deficiency virus (HIV)-1. The  
 CC invention is useful in amplifying and detecting HIV-1 nucleic acid  
 CC sequences and in providing additional information about the infective  
 CC agent, such as its genetic subgroup or drug-resistance phenotype based on  
 CC detectable sequence information. The present sequence is HIV-1 gag2 gene  
 CC amplifying primer.  
 CC  
 SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 DB 2777 TGTGACAAATATGGCATCA 2796  
 20 TGTGCAAGAAGAGGCATCA 1  
 XX  
 RESULT 2703  
 ADJ46546/c  
 ID ADJ46546 standard; DNA; 20 BP.  
 XX  
 AC ADJ46546;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Human reguim antisense oligonucleotide ISIS #152737.  
 XX  
 KW human; reguim; hyperproliferative disorder; cancer;  
 KW developmental disorder; infection; inflammation; tumour formation; ss;  
 KW antisense.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN US2004023385-A1.  
 XX  
 PD 05-FEB-2004.  
 XX  
 PF 05-AUG-2002; 2002US-00212993.  
 XX

```

XX 05-AUG-2002; 2002US-00212993.
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Freier SM, Dobie KW;
XX WPI; 2004-142666/14.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX regulem, useful for modulating expression of regulem or for treating
XX cancer or developmental disorders.
XX
XX Example 15; SEQ ID NO 21; 66bp; English.
XX
XX The invention relates to a compound targeted to a nucleic acid molecule
XX encoding regulem which specifically hybridises with the nucleic acid
XX molecule encoding regulem and inhibits the expression of regulem. The
XX compound, particularly the antisense oligonucleotide is useful in
XX modulating the function of nucleic acid molecules encoding regulem. The
XX antisense compound can also be used as research tools and diagnostics. It
XX can also be used as tools in differential and/or combinatorial analyses
XX to elucidate expression patterns of a portion or the entire complement of
XX genes expressed within cells and tissues. The compound can also be used
XX for treating diseases or conditions associated with regulem, preferably
XX hypoproliferative disorder, e.g. cancer or a developmental disorder. The
XX compound can also be used as prophylaxis, e.g. to prevent or delay
XX infection, inflammation or tumour formation. The present sequence
XX represents the human regulem antisense oligonucleotide.
XX
XX Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1351 TAGATGTGTCACCTACCTG 1370
XX Db | ||||| ||||| |||||
XX 20 TTGATGTGACCACTCACCTG 1
XX
XX RESULT 2704
XX ADK95691
XX ID ADK95691 standard; DNA; 20 BP.
XX AC ADK95691;
XX DT 06-MAY-2004 (First entry)
XX DE Primer of the invention #1411.
XX KW human; single nucleotide polymorphism; SNP; ss; primer.
XX OS Synthetic.
XX JP2003259875-A.
XX 16-SEP-2003.
XX PD 08-MAR-2002; 2002JP-00064373.
XX PE 08-MAR-2002; 2002JP-00064373.
XX PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 4720; 2627bp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human

```

```
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX  
SQ Sequence 20 BP; 1 A; 5 C; 6 G; 8 T; 0 U; 0 Other;  
  
OY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
DB 1 TGCTGTGTTCTGCTGCTCATG 20  
169 TGCTGTGCTGCTGCTGCTG 188  
OY 1284 GGACAGCCTCAGTGGTCCTCAC 1303  
DB 1 GGACAGCCTCAGAGATTCAC 20  
  
RESULT 2705  
ADK94559  
ID ADK94559 standard; DNA; 20 BP.  
XX  
AC ADK94559;  
XX  
DT 06-MAY-2004 (first entry)  
XX  
DE Primer of the invention #279.  
XX  
KW human; single nucleotide polymorphism; SNP; ss; primer.  
XX  
OS Synthetic.  
XX  
PN JP2003259875-A.  
PD 16-SEP-2003.  
XX  
PF 08-MAR-2002; 2002JP-00064373.  
XX  
PR 08-MAR-2002; 2002JP-00064373.  
XX  
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
XX  
DR WPI; 2004-093977/10.  
XX  
PT Novel polynucleotide useful for PCR amplification along with two DNA  
PT fragment from another set of sequences, or for detecting single  
PT nucleotide polymorphism in human gene.  
XX  
PS Claim 2; SEQ ID NO 3588; 2627bp; Japanese.  
XX  
CC The present invention relates to a polynucleotide isolated from a human  
CC gene and is useful for detecting a single nucleotide polymorphism in a  
CC human gene or for diagnosing of disease. The invention enables the  
CC detection of a single nucleotide polymorphism in a human gene. The  
CC present sequence represents a primer of the invention.  
XX  
SQ Sequence 20 BP; 7 A; 7 C; 5 G; 1 T; 0 U; 0 Other;  
  
OY Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
DB 1 GGACAGCCTCAGAGATTCAC 20  
1284 GGACAGCCTCAGTGGTCCTCAC 1303  
1 GGACAGCCTCAGAGATTCAC 20  
  
RESULT 2706  
ADK95229  
ID ADK95229 standard; DNA; 20 BP.  
XX  
AC ADK95229;  
XX  
DT 06-MAY-2004 (first entry)
```

```

DE Primer of the invention #949.
XX
XX human; single nucleotide polymorphism; SNP; ss; primer.
XX
XX Synthetic.
XX
XX JP2003259875-A.
XX
XX 16-SEP-2003.
XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX 08-MAR-2002; 2002JP-00064373.
XX
XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2004-093977/10.
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.
XX
XX Claim 2; SEQ ID NO 4258; 2627bp; Japanese.
XX
XX The present invention relates to a polynucleotide isolated from a human
XX gene and is useful for detecting a single nucleotide polymorphism in a
XX human gene or for diagnosing of disease. The invention enables the
XX detection of a single nucleotide polymorphism in a human gene. The
XX present sequence represents a primer of the invention.
XX
XX Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 3521 AGAGCCAGAGTGCATCC 3540
XX 1 AGAGCCAGAGTGCATGC 20
XX
XX RESULT 2707
XX ADJ60470/c
XX ID ADJ60470 standard; DNA; 20 BP.
XX
XX AC ADJ60470;
XX
XX DT 06-MAY-2004 (first entry)
XX
XX DE Oligonucleotide associated to Tryptase-a #6.
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX OS
XX PN WO2004011613-A2.
XX
XX PD 05-FEB-2004.
XX
XX PF 25-JUL-2003; 2003WO-US023509.
XX
XX PR 29-JUL-2002; 2002US-0399076P.
XX
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Tang L, Sandrasagra A, Aguilar D, Miller S,
XX PI Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-203534/19.

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XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX PT initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 1326; 85bp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX oligonucleotide and optionally surfactant operatively linked to the
XX oligonucleotide. The method is useful for preventing or treating a
XX respiratory or lung disease, which involves administering to the airways
XX of a subject an effective amount of an inhibitor. The oligonucleotide is
XX useful for production of a medicament for the prevention and/or treatment
XX of a respiratory or lung disease. The respiratory or lung disease is
XX chosen from airway inflammation, allergy(ies), asthma, impeded
XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX obstruction. The present sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 5 A; 7 C; 8 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 160 TGCTGGCGCTGCTGGCGCTG 179
XX 20 TGCTGGCGCTGCTGGCTGCTG 1
XX
XX RESULT 2708
XX ADJ24186/c
XX ID ADJ24186 standard; DNA; 20 BP.
XX
XX AC ADJ24186;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human endothelial lipase antisense oligonucleotide, SEQ ID 2584.
XX
XX Antilipemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
XX Human; Endothelial lipase; dyslipidaemia; high density lipoprotein; HDL;
XX cardiovascular disorder; metabolic syndrome X; ss.
XX
XX Homo sapiens.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
XX and 3' ends, which are 4 nucleotides in length. Also all
XX cytidine residues are 5-methylcytidines"
XX
XX PN WO2004009541-A2.
XX
XX PD 29-JAN-2004.
XX
XX PF 18-JUL-2003; 2003WO-US022410.
XX
XX PR 19-JUL-2002; 2002US-0397106P.
XX
XX PA (PHAA ) PHARMACIA CORP.
XX
XX Bhat BG;

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XX  WPI; 2004-132912/13.
XX
XX  New antisense oligonucleotide for modulating endothelial lipase
XX  expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
XX  high density lipoprotein or cardiovascular disorders.
XX
XX  Claim 3; SEQ ID NO 2584; 1007bp; English.
XX
XX  The present invention relates to antisense oligonucleotides (ADJ21603-
XX  ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
XX  (ADJ25517), where the antisense oligonucleotide specifically hybridizes
XX  with and inhibits the expression of EL. The antisense oligonucleotides
XX  are useful for modulating the expression of endothelial lipase in cells
XX  or tissues to treat diseases associated with EL expression, such as
XX  dyslipidemia, low high density lipoprotein (HDL), cardiovascular
XX  disorder or metabolic syndrome X. In addition, the oligonucleotides are
XX  used for diagnostic, prophylaxis, or as research reagents or kits.
XX
XX  Sequence 20 BP; 9 A; 2 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX  Query Match          0.1%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX  2590 CAAGAGATGACTTTTCTT 2609
XX  DB      20 CAACACAGGACTTTTCTT 1
XX
XX  RESULT 2709
XX  ADK76311/C
XX  ID      ADK76311 standard; DNA; 20 BP.
XX
XX  ADK76311;
XX
XX  20-MAY-2004 (first entry)
XX
XX  Chimeric phosphorothioate oligonucleotide to target Nav1.3 #3645.
XX
XX  Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX  diabetic neuropathy; arthritic pain; migraine headache;
XX  infantile epilepsy; ataxia; ss.
XX
XX  Synthetic.
XX
XX  WO2004016754-A2.
XX
XX  26-FEB-2004.
XX
XX  14-AUG-2003; 2003WO-US025465.
XX
XX  14-AUG-2002; 2002US-0403416P.
XX
XX  (PHAA ) PHARMACIA CORP.
XX
XX  Roberda SL;
XX
XX  WPI; 2004-203785/19.
XX
XX  New antisense compound targeted to a nucleic acid molecule encoding
XX  Nav1.3, useful for treating a disease or condition associated
XX  with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX  disorder, or ataxia.
XX
XX  Claim 4; SEQ ID NO 3645; 417bp; English.
XX
XX  The present invention relates to an antisense compound targeted to a
XX  nucleic acid molecule encoding Nav1.3, where the antisense compound
XX  specifically hybridizes with and inhibits the expression of Nav1.3. The
XX  compound and composition are useful for treating a disease or condition
XX  associated with Nav1.3, e.g. pain including but not limited to
XX  neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,

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CC  diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC  pain from burns, migraine headache, cluster headache, mild-to-moderate
CC  headache, seizure disorder such as childhood seizure disorder, including
CC  but not limited to neonatal or infantile epilepsy, or ataxia. The present
CC  sequence represents a chimeric phosphorothioate oligonucleotide with
CC  2' MOE wings and a deoxy gap. Used during the antisense inhibition of
CC  human Nav1.3 expression, the oligonucleotides are designed to target
CC  different regions of the human Nav1.3 RNA.
XX
XX  Sequence 20 BP; 6 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX  Query Match          0.1%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX  2362 AACATGACGATATGCTA 2381
XX  DB      20 AACATGATCATATGCTA 1
XX
XX  RESULT 2710
XX  ADL32436/C
XX  ID      ADL32436 standard; DNA; 20 BP.
XX
XX  ADL32436;
XX
XX  20-MAY-2004 (first entry)
XX
XX  Clone specific PCR primer to amplify human full length cDNA SeqID 4469.
XX
XX  human, medicine; signal transduction; glycoprotein; transcription;
XX  oligo-capping method; ss; PCR; primer.
XX
XX  Homo sapiens.
XX
XX  EP1396543-A2.
XX
XX  10-MAR-2004.
XX
XX  07-JUL-2000; 2003EP-00025638.
XX
XX  08-JUL-1999; 99JP-00194486.
XX  PR 11-JAN-2000; 2000JP-00187774.
XX  PR 02-MAY-2000; 2000JP-00183865.
XX  PR 07-JUL-2000; 2000EP-00114089.
XX
XX  (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
XX  Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y,
XX  Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
XX
XX  WPI; 2004-204755/20.
XX
XX  New oligonucleotide primers (830 CDNAe) useful for synthesizing full
XX  length human CDNAe.
XX
XX  Example 18; SEQ ID NO 4469; 1340bp; English.
XX
XX  This invention relates to a novel primers useful for synthesizing full
XX  length CDNA molecules that encode human proteins. Specifically, it refers
XX  to secretory or membrane proteins that are potential therapeutic agents/
XX  target molecules in the field of medicine, and in particular genes
XX  encoding proteins that are associated with signal transduction,
XX  glycoproteins and transcription. The present invention describes a method
XX  for efficiently cloning a full length human CDNA from both the 5' and 3'
XX  ends using the oligo-capping method. This oligonucleotide sequence is a
XX  human clone specific PCR primer used in an exemplification of the
XX  invention.
XX
XX  Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX  Query Match          0.1%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 1.9e+03;

```

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 2700 GCCAAGCTGAGTAAACT 2719  
AC |||||  
XX |||||  
Db 20 GCCAATCTGTATAAACT 1

RESULT 2711  
ADM69363  
ID ADM69363 standard; DNA: 20 BP.

XX ADM69363;

XX 03-JUN-2004 (first entry)

XX Plant gene polymorphism marker related primer, SEQ ID 242.

XX Primer; variation mapping; mutation mapping; plant;  
XX gene polymorphism marker; ss.

XX Synthetic.

XX JP2003289885-A.

XX 14-OCT-2003.

XX 31-JAN-2003; 2003JP-00024620.

XX 01-FEB-2002; 2002JP-00025338.

XX (RIKA ) RIKAGAKU KENKYUSHO.

XX (SAIM-) SAI MEDIA KK.

XX (MATS/) MATSUI M.

XX (NAKA/) NAKAZAWA M.

XX WPI; 2004-126231/13.

PT A primer set and method useful for mapping at least the  
PT variation/mutation part of a plant gene using a gene polymorphism marker.

XX Claim 7; SEQ ID NO 242; 120pp; Japanese.

XX The present invention relates to a primer set and method for mapping at  
XX least the variation/mutation part of a plant gene using a gene  
XX polymorphism marker. A mutation site of the plant gene is mapped by  
XX utilizing a genetic polymorphism marker as follows: (a) genomic DNA is  
XX prepared from a plant homozygously having a mutation to be an object of  
XX the mapping; (b) A forward primer 1 containing a base corresponding to  
XX the gene polymorphic maker of one ecotype plant, a forward primer 2  
XX containing a base corresponding to the genetic polymorphism of the other  
XX ecotype plant and a reverse primer 3 based on the base sequence common  
XX with both the ecotype plants are prepared; (c) two kinds of  
XX oligonucleotides emitting fluorescence of different colors when the  
XX genetic polymorphism marker is detected are prepared; (d) an  
XX amplification reaction of the genomic DNA is carried out in the presence  
XX of the primers 1, 2 and 3 and the two kinds of the oligonucleotides; (e)  
XX the fluorescence intensity emitted from the resultant reactional product  
XX is detected and (f) the position on the genome of the mutation site is  
XX determined from the results of detection. The present sequence is a  
XX primer, used to illustrate the invention.

XX Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4881 AACAGATGATATGACCTT 4900  
AC |||||  
XX |||||  
Db 1 AACAGAGAGCATATGACCTT 20

RESULT 2712

ADL57889  
ID ADL57889 standard; DNA: 20 BP.  
XX  
XX ADL57889;

XX 03-JUN-2004 (first entry)

XX Human ESM-1 antisense oligonucleotide seqid 138.

XX cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;

XX gene therapy; endothelial specific molecule-1; ESM-1;

XX ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;

XX angiogenic disorder; immunological disorder; cardiovascular disorder;

XX neurological disorder; antisense technology; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

XX modified\_base 1..20

XX /\*tag= b

XX /mod\_base= OTHER

XX /note= "OTHER= phosphorothioate backbone. All cytidine

XX residues are 5-methylcytidines"

XX modified\_base 1..5

XX /\*tag= a

XX /mod\_base= OTHER

XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"

XX /\*tag= c

XX /mod\_base= OTHER

XX /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"

XX NO2004021978-A2.

XX 18-MAR-2004.

XX 19-AUG-2003; 2003WO-US025833.

XX 19-AUG-2002; 2002US-0404495P.

XX (PHAA ) PHARMACIA CORP.

XX Weinstein EJ, Griggs DW;

XX WPI; 2004-248358/23.

XX New antisense compound, having a sequence targeted to a nucleic acid  
XX encoding endothelial specific molecule-1 (ESM-1), useful for preparing a  
XX composition for treating e.g., diabetes, cancer or cardiovascular  
XX disorder.

XX Claim 3; SEQ ID NO 138; 555pp; English.

XX The invention describes a new antisense compound, having a sequence  
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial  
XX specific molecule-1 (ESM-1), that specifically hybridizes with the  
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a  
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and  
XX treating an animal having a disease or condition associated with ESM-1.  
XX The compound is useful for preparing a composition for treating diabetes,  
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,  
XX cardiovascular or neurological disorder. This sequence represents an  
XX antisense oligonucleotide that can be used to modulate expression of  
XX endothelial specific molecule-1 (ESM-1).

XX Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4306 CTGACTCTGTGTGACCTG 4325  
AC |||||  
XX |||||



Query Match	0.1%	Score 15.2	DB 1	Length 20
Best Local Similarity	85.0%	Prod. No. 1.9e+03		
Matches 17	Conservative	0	Mismatches 3	Indels 0
			Gaps 0	
Db	404 GAAGACCGACCGTCGACCC 423			
	1 GAAGACCGAAGTCATCC 20			
RESULT 2715				
ID	ADO45959/c			
XX	ADO45959 standard; DNA; 20 BP.			
XX	ADO45959;			
XX	15-JUL-2004 (first entry)			
DE	Human oligonucleotide #1325.			
XX				
XX	Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;			
XX	CCR3; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;			
XX	tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;			
XX	lung disease; hyper-responsiveness; adenosine; adenosine A receptor;			
XX	asthma; lung allergy; inflammation; inflammatory disease;			
XX	airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;			
XX	chronic obstructive pulmonary disease; COPD; allergic rhinitis;			
XX	acute respiratory distress syndrome; pulmonary hypertension;			
XX	lung inflammation; bronchitis; airway obstruction; bronchoconstriction.			
OS	Homo sapiens.			
PN	US2004049022-A1.			
XX				
PD	11-MAR-2004.			
XX				
PF	25-JUL-2003; 2003US-00627930.			
XX				
PR	23-APR-2002; 2002MO-US013135.			
XX				
RR	23-APR-2002; 2002MO-US013143.			
XX				
XX	(NYCE/) NYCE J W.			
PA	(SAND/) SANDRASAGRA A.			
PA	(TANG/) TANG L.			
PA	(AGUI/) AGUILAR D.			
PA	(MILL/) MILLER S.			
PA	(SHAH/) SHAHAUDDIN S.			
PA	(LUH/) LU H.			
XX	(CONG/) CONG H.			
XX				
PI	Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;			
PI	Shahabuddin S, Lu H, Cong H;			
XX				
DR	WPI: 2004-293804/27.			
XX				
PT	Novel single or multiple target oligonucleotide anti-sense to e.g.			
PT	initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,			
PT	RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.			
XX	asthma.			

PS	Claim 2, SEQ ID NO 1326; 174pp; English.
XX	The invention relates to oligonucleotides anti-sense to an initiation
CC	codon, coding region, 5' or 3' intron-exon junction, intron or region
CC	with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC	chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC	-5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC	tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC	also relates to a method of screening a candidate compound that binds to
CC	one or more nucleic acid target(s) or expressed product(s), for the
CC	prevention and/or treatment of a respiratory or lung disease. The
CC	oligonucleotides are useful for reducing or inhibiting expression of a
CC	gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC	CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC	tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC	useful for preventing or treating a respiratory or lung disease. The
CC	respiratory or lung disease is associated with hyper-responsiveness to
CC	and/or increased levels of, adenosine and/or levels of adenosine A
CC	receptor(s), and/or asthma and/or lung allergies associated with
CC	inflammation or an inflammatory disease. The respiratory or lung disease
CC	is chosen from airway inflammation, allergy, asthma, impaired respiration,
CC	cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC	allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC	hypertension, lung inflammation, bronchitis, airway obstruction or
CC	bronchoconstriction. This sequence represents an oligonucleotide of the
CC	invention.
SQ	Sequence 20 BP; 5 A; 7 C; 8 G; 0 T; 0 U; 0 Other;
XX	
XX	
Query Match	0.1%; Score 15.2; DB 1; Length 20;
Beet local Similarity	85.0%; Pred. No. 1.9e+03;
Matches	17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
Oy	160 TGCTGGCGCTGCTGCCTG 179       20 TGCTGGCGCTGCCGTCCTG 1
Db	
RESULT 2716	
ID	ADO71820/c
ADO71820	standard; DNA; 20 BP.
XX	
AC	ADO71820;
XX	
DT	15-JUL-2004 (first entry)
XX	
DE	RT-PCR primer used to generate human RIKEN 2210016F16 cDNA SeqID 13.
XX	
KX	methylacion frequency; RIKEN 2210016F16; stomach cancer; anticancer;
KW	cytostatic; human; ss; PCR; primer; RT-PCR.
XX	
OS	Homo sapiens.
XX	
PN	JP2004113113-A.
XX	
PD	15-APR-2004.
XX	
PF	26-SEP-2002; 2002JP-00280684.
XX	
PR	26-SEP-2002; 2002JP-00280684.
PA	(KOKU-) KOKURITSU GAN CENT SOCHO.
PA	(SUMO) SUMITOMO CHEM CO LTD.
XX	
DR	WI; 2004-322540/30.
XX	
PT	Evaluating canceration degree of mammalian cell, by measuring methylacion
PT	frequency of homologue of RIKEN 2210016F16 gene present in cell,
PT	determining canceration degree based on variance obtained by comparing
XX	measured frequency and control.
XX	
S8	Example 2, SEQ ID NO 13; 34pp; Japanese.
XX	





Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 978 CAGACTTTGAACTTGAGA 997  
 Db 20 CAGACTTTGGACCATGAAGA 1

RESULT 2719  
 ADO53351/c  
 ID ADO53351 standard; DNA: 20 BP.

AC ADO53351;

DT 15-JUL-2004 (first entry)

DE Farnesoid X receptor gene expression antisense inhibitory oligo #724.

XX sa: antidiabetic; immunosuppressive; cardiovascular; antilipemic;  
 KW antidiabetic; hepatotropic; litholytic; anorectic;  
 KW neuroprotective; vasotropic; antisense; gene therapy;  
 KW Farnesoid X receptor; diabetes; immunological disorder;  
 KW cardiovascular disorder; dyslipidemia; atherosclerosis;  
 KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;  
 KW gallstones; hypertriglyceridemia; obesity; neurological disorder;  
 KW ischemia; reperfusion; diagnostics; prophylaxis.

OS Homo sapiens.

PN WO2004030750-A1.

PD 15-APR-2004.

PF 25-SEP-2003; 2003WO-US030353.

PR 25-SEP-2002; 2002US-0413588P.

PA (PHAA) PHARMACTA CORP.

PI Kane CD;

DR WPI; 2004-347928/32.

XX New antisense oligonucleotides useful for modulating expression of  
 PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,  
 PT e.g. diabetes, immunological disorders, cardiovascular disorders,  
 PT gallstones or obesity.

PS Claim 4; SEQ ID NO 724; 150pp; English.

XX The invention relates to an antisense compound 8-30 nucleobases in length  
 CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),  
 CC where the antisense compound specifically hybridizes with and inhibits  
 CC the expression of FXR. The composition and methods are useful for  
 CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or  
 CC tissues, or for treating diseases or conditions associated with FXR, such  
 CC as diabetes, immunological disorders, cardiovascular disorders, e.g.  
 CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density  
 CC lipoprotein), elevated LDL (low density lipoprotein) or  
 CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,  
 CC neurological disorders, or ischemia/reperfusion injury. In addition, the  
 CC composition is used for diagnostics, prophylaxis, or as research reagents  
 CC or kits. This sequence corresponds to an antisense oligonucleotide of the  
 CC invention.

XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 979 AGACTTTGAACTTGAGAC 998  
 Db 20 AGACTTTGGACCATGAAGAC 1

RESULT 2720  
 ADO81003  
 ID ADO81003 standard; DNA: 20 BP.

AC ADO81003;

DT 29-JUL-2004 (first entry)

DE Sheep prion protein microsatellite locus primer #45.

XX gene typing; polymorphic microsatellite loci; PMU;  
 KW disease predisposition; microsatellite marker; prion disease;  
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;  
 KW milk protein; hormone; transcription factor; pT7-blue-vector; sheep;  
 KW microsatellite; PCR; primer; ss.

OS Ovis aries.

PN DE10236711-A1.

PD 26-FEB-2004.

PF 09-AUG-2002; 2002DE-01036711.

PR 09-AUG-2002; 2002DE-01036711.

PA (UYHO-) UNIV HOHENHEIM.

PI Geldermann H, Preuss S, Han Y;

DR WPI; 2004-215730/21.

XX Typing genes that contain polymorphic microsatellite loci, useful for  
 PT identifying predisposition to disease, by amplification and determining  
 PT length of amplicons.

PS Example 3; Page 26; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one  
 CC or more polymorphic microsatellite loci (PMU). The method comprises: PCR  
 CC amplification of at least one DNA region of (I) that includes PMU, using  
 CC as template a DNA sample containing at least one segment of (I); and  
 CC determining the length of the resulting amplicon(s). Also described are:  
 CC a method of determining (M2) microsatellite markers (MM) for  
 CC predisposition to a disease, associated with a gene that includes one or  
 CC more PMU, and prediagnosis (M3) of diseases associated with gene that  
 CC include PMU. The method is used to identify microsatellite markers, in a  
 CC disease-related gene, that are associated with a predisposition to  
 CC diseases and for prediagnosis of such diseases, especially prion diseases  
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and  
 CC metabolic diseases; also to type genes that encode milk proteins,  
 CC hormones or transcription factors. The method is simpler, quicker and  
 CC particularly less expensive than known methods based on sequencing. This  
 CC sequence represents a primer used to genotype a region of the sheep prion  
 CC protein (Prp) comprising a polymorphic microsatellite locus.

XX Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 907 TCTGCAAGAGCAACCTC 926  
 Db 1 TCTGCAAGAGCCACACCTC 20

RESULT 2721

```

AD080957
ID   AD080957 standard; DNA; 20 BP.
XX
XX   AD080957;
XX
XX   29-JUL-2004 (first entry)
XX
XX
XX
XX   Cow prion protein microsatellite locus primer #47.
XX
XX   gene typing; polymorphic microsatellite loci; PML;
XX   disease predisposition; microsatellite marker; prion disease;
XX   cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX   milk protein; hormone; transcription factor; pT-blue-vector; cow;
XX   microsatellite; PCR; primer; ss.
XX
XX   Bos taurus.
XX
XX   DE10236711-A1.
XX
XX   26-FEB-2004.
XX
XX   09-AUG-2002; 2002DE-01036711.
XX
XX   09-AUG-2002; 2002DE-01036711.
XX
XX   (UYHO-) UNITV HOHENHEIM.
XX
XX   Geldermann H, Preusse S, Han Y;
XX
XX   WPI; 2004-215730/21.
XX
XX   Typing genes that contain polymorphic microsatellite loci, useful for
XX   identifying predisposition to disease, by amplification and determining
XX   length of amplicons.
XX
XX   Example 3; Page 25; 64pp; German.
XX
XX   The invention describes a method of typing (M1) a gene (I) that has one
XX   or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX   amplification of at least one DNA region of (I) that includes PML, using
XX   as template a DNA sample containing at least one segment of (I); and
XX   determining the length of the resulting amplicon(s). Also described are:
XX   a method of determining (M2) microsatellite markers (MM) for
XX   predisposition to a disease, associated with a gene that includes one or
XX   more PML; and prediagnosis (M3) of diseases associated with gene that
XX   include PML. The method is used to identify microsatellite markers, in a
XX   disease-related gene, that are associated with a predisposition to
XX   diseases and for prediagnosis of such diseases, especially prion diseases
XX   but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX   metabolic diseases; also to type genes that encode milk proteins,
XX   hormones or transcription factors. The method is simpler, quicker and
XX   particularly less expensive than known methods based on sequencing. This
XX   sequence represents a primer used to genotype a region of the cow prion
XX   protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX   Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX   Query Match      0.1%; Score 15.2; DB 1; Length 20;
XX   Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX   Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX   QY      907  TCTGCAAGAGCAACACCTC 926
XX          ||| ||| ||| ||| ||| |||
XX   DB      1  TCTCCAAAGACGACACCTC 20
XX
XX   RESULT 2722
XX   ADO16652/C
XX   ID   ADO16652 standard; DNA; 20 BP.
XX
XX   ADO16652;
XX
XX   29-JUL-2004 (first entry)
XX

```

XX	4	synthesis-period of neuroblastoma related primer, SEQ ID 914.
DE	4	synthesis-period of neuroblastoma related primer, SEQ ID 914.
XX	Human; 4	synthesis-period; neuroblastoma; stage 4S; primer; ss.
KW	Synthetic.	
XX	WO2004039975-A1.	
XX	13-MAY-2004.	
PD	30-OCT-2003; 2003WO-JP013932.	
XX	30-OCT-2002; 2002JP-00316586.	
PR	(HISM ) HISAMITSU PHARM CO LTD.	
PA	(CHIB-) CHIBA PREFECTURE.	
PA	Nakagawara A, Ohira M;	
XX	WPI, 2004-390323/36.	
DR	Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma	
XX	cells useful for prognosing and determining progress stage of	
PT	neuroblastomas.	
PT	Claim 8; SEQ ID NO 914; 455bp; Japanese.	
XX	The present invention relates to human nucleic acid sequences (I;	
CC	AD015729-AD015912) obtained from 4 synthesis-period (stage 4S) of	
CC	neuroblastoma cell. (I) is useful for prognosing and determining the	
CC	progress stage of 4 synthesis-period of neuroblastoma. The present	
CC	sequence is a primer, used to illustrate the invention.	
XX	Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;	
SEQ	Query Match 0.1%; Score 15.2; DB 1; Length 20;	
	Best Local Similarity 85.0%; Pred. No. 1.9e+03;	
	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
OY	805 CTCTCATCAAGCATGACC 824	
DB	20 CTCTTTCATGCGCTGACC 1	
RESULT 2723		
ADP76750/C		
ID	ADP76750 standard; DNA; 20 BP.	
XX	ADP76750;	
AC	12-AUG-2004 (first entry)	
XX	Chimeric phosphorothioate oligonucleotide #549.	
DE	GPAT; Antidiabetic; Cardiant;	
KW	Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;	
KW	reperfusion; ss.	
XX	Synthetic.	
OS		
XX	Key	
FT	modified_base	
FT	1..4	
FT	Location/Qualifiers	
FT	/*tag= a	
FT	/mod_base= other	
FT	/note= "2-methoxyethyl wing"	
FT	17..20	
FT	/*tag= b	
FT	/mod_base= other	
FT	/note= "2-methoxyethyl wing"	
XX		
PN	WO2004035763-A2.	

PD 29-APR-2004.  
XX  
PF 02-OCT-2003; 2003WO-US033332.  
XX  
XX 17-OCT-2002; 2002US-0419268P.  
PR  
XX (PHAA ) PHARMACIA CORP.  
PA  
XX Broschat KO, Crosby SD;  
XX  
XX WPI; 2004-348453/32.  
DR  
XX  
XX New compounds, particularly antisense oligonucleotides targeted to a  
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,  
PT ischemia/reperfusion injury.  
XX  
XX Claim 4; SEQ ID NO 549; 175pp; English.  
XX  
XX The present invention relates to a compound which specifically hybridizes  
CC with a nucleic acid molecule encoding GFAT, and inhibits the expression  
CC of GFAT. Specifically claimed are antisense oligonucleotides capable of  
CC modulating the expression of GFAT, and which comprise any of the 3063  
CC sequences of 20 base pairs, given in the specification. The compound,  
CC composition and methods are useful for treating a disease or condition  
CC associated with GFAT, such as a disease or condition, e.g. diabetes, a  
CC cardiovascular or neurological disorder, ischemia/reperfusion injury.  
CC They are also useful in research and diagnostics for modulating the  
CC expression of GFAT. The present sequence represents a chimeric  
CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
CC oligonucleotides inhibit human GFAT expression.  
XX  
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 2202 TTGGAAGAAAGGCTTGA 2221  
Db 20 TTGGAAGCAAGGCTATGA 1  
RESULT 2724  
ADP77105/C  
ID ADP77105 standard; DNA; 20 BP.  
XX  
AC ADP77105;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Chimeric phosphorothioate oligonucleotide #904.  
XX  
XX GFAT; Antidiabetic; Cardiant;  
KM Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;  
KM reperfusion; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FH modified\_base 1..4  
FT /\*tag= a  
FT /mod\_base= other  
FT /note= "2-methoxyethyl wing"  
FT modified\_base 17..20  
FT /\*tag= b  
FT /mod\_base= other  
FT /note= "2-methoxyethyl wing"  
XX  
PN W02004035763-A2.  
XX  
PD 29-APR-2004.  
XX

PF 02-OCT-2003; 2003WO-US033332.  
XX  
XX 17-OCT-2002; 2002US-0419268P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
PA  
XX Broschat KO, Crosby SD;  
XX  
XX WPI; 2004-348453/32.  
DR  
XX  
XX New compounds, particularly antisense oligonucleotides targeted to a  
PT nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase  
PT (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,  
PT ischemia/reperfusion injury.  
XX  
XX Claim 4; SEQ ID NO 904; 175pp; English.  
XX  
XX The present invention relates to a compound which specifically hybridizes  
CC with a nucleic acid molecule encoding GFAT, and inhibits the expression  
CC of GFAT. Specifically claimed are antisense oligonucleotides capable of  
CC modulating the expression of GFAT, and which comprise any of the 3063  
CC sequences of 20 base pairs, given in the specification. The compound,  
CC composition and methods are useful for treating a disease or condition  
CC associated with GFAT, such as a disease or condition, e.g. diabetes, a  
CC cardiovascular or neurological disorder, ischemia/reperfusion injury.  
CC They are also useful in research and diagnostics for modulating the  
CC expression of GFAT. The present sequence represents a chimeric  
CC phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these  
CC oligonucleotides inhibit human GFAT expression.  
XX  
SQ Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 849 AGCAGCCAGTCTGTGAGTA 868  
Db 20 AGAACCCAGTCTGTGATTA 1  
RESULT 2725  
ADP77087/C  
ID ADP77087 standard; DNA; 20 BP.  
XX  
AC ADP77087;  
XX  
DT 12-AUG-2004 (first entry)  
XX  
DE Chimeric phosphorothioate oligonucleotide #886.  
XX  
XX GFAT; Antidiabetic; Cardiant;  
KM Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;  
KM reperfusion; ss.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FH modified\_base 1..4  
FT /\*tag= a  
FT /mod\_base= other  
FT /note= "2-methoxyethyl wing"  
FT modified\_base 17..20  
FT /\*tag= b  
FT /mod\_base= other  
FT /note= "2-methoxyethyl wing"  
XX  
PN W02004035763-A2.  
XX  
PD 29-APR-2004.  
XX  
PF 02-OCT-2003; 2003WO-US033332.  
XX

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PR 17-OCT-2002; 2002US-0419268P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Broschat KO, Crosby SD;
XX
XX WPI; 2004-348453/32.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
XX (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
XX ischemia/reperfusion injury.
XX
XX Claim 4; SEQ ID NO 886; 175pp; English.
XX
XX The present invention relates to a compound which specifically hybridizes
XX with a nucleic acid molecule encoding GFAT, and inhibits the expression
XX of GFAT. Specifically claimed are antisense oligonucleotides capable of
XX modulating the expression of GFAT, and which comprise any of the 3063
XX sequences of 20 base pairs, given in the specification. The compound,
XX composition and methods are useful for treating a disease or condition
XX associated with GFAT, such as a disease or condition, e.g. diabetes, a
XX cardiovascular or neurological disorder, ischemia/reperfusion injury.
XX They are also useful in research and diagnostics for modulating the
XX expression of GFAT. The present sequence represents a chimeric
XX phosphorothioate oligonucleotide with 2'-MO3 wings and a deoxy gap, these
XX oligonucleotides inhibit human GFAT expression.
XX
XX Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 854 CCAGTCCTGTCAGTACACAC 873
XX |||||
XX 20 CCAGTCCTGTCATAGCCAC 1
XX
XX RESULT 2726
XX ADP12266
XX ID ADP12266 standard; DNA; 20 BP.
XX
XX AC ADP12266;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Tagman probe set 2 #124.
XX
XX transplamt rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
XX
XX Homo sapiens.
XX
XX WO2004042346-A2.
XX
XX PD 21-MAY-2004.
XX
XX 24-APR-2003; 2003WO-US012946.
XX
XX 24-APR-2002; 2002US-0031831.
XX
XX 20-DEC-2002; 2002US-00325899.
XX
XX (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
XX Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;
XX
XX WPI; 2004-400724/37.
XX
XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of

```

```

PT the genes.
XX
XX Claim 58; SEQ ID NO 2275; 1762pp; English.
XX
XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprises detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
XX xenotransplant rejection or mechanical organ replacement rejection,
XX an individual. The method is also useful in assessing the immune status of
XX an individual. The method are also useful in diagnosing and monitoring
XX diseases that involve the immune system, e.g. rheumatoid arthritis,
XX lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
XX viral, bacterial or fungal infection. The present sequence represents a
XX probe for a 50 mer oligonucleotide marker for diagnosis and monitoring of
XX allograft rejection and other disorders.
XX
XX Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 1.9e+03;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 144 CCGCGCTGCTGCGCTGCT 163
XX |||||
XX 1 CCGCGCTGCTGCGCTGCT 20
XX
XX RESULT 2727
XX ADO31253/c
XX ID ADO31253 standard; DNA; 20 BP.
XX
XX AC ADO31253;
XX
XX DT 12-AUG-2004 (first entry)
XX
XX DE Human XT-I gene fragment for glucosaminoglycan reduction in glial scars.
XX
XX ss; vulnerrary; cell therapy; glial scar; primary proteoglycan;
XX chain initiation enzyme; elongation enzyme; neuronal regeneration;
XX glucosaminoglycan.
XX
XX Homo sapiens.
XX
XX WO2004041197-A2.
XX
XX PD 21-MAY-2004.
XX
XX 31-OCT-2003; 2003WO-US034806.
XX
XX 01-NOV-2002; 2002US-0423082P.
XX
XX 16-MAY-2003; 2003US-0471447P.
XX
XX (UYCA-) UNITV CASE WESTERN RESERVE.
XX
XX Grimpe B, Silver J;
XX
XX WPI; 2004-400518/37.
XX
XX Reducing GAG content in a glial scar comprises inhibiting the expression
XX of primary proteoglycans or the expression and/or activity of a chain
XX initiation or elongation enzyme.
XX
XX Example 11; SEQ ID NO 75; 265pp; English.
XX
XX The invention relates to a method of reducing glucosaminoglycan (GAG)
XX content in a glial scar by inhibiting the expression of primary
XX proteoglycans or the expression and/or activity of a chain initiation or
XX elongation enzyme. The method is useful in reducing GAG content in a
XX glial scar and promoting neuronal regeneration. This sequence corresponds
XX to a fragment of the human XT-I gene used to identify sequences to which

```

CC antisense oligos, ribozymes, RNAi constructs can designed.  
 XX Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other:  
 SQ  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 OY 439 GCTTCAACCTGAGGCAAA 458  
 DB 20 GCTTCAACCTGAGGCAAA 1  
 RESULT 2728  
 ADO33370/c  
 ID ADO33370 standard; DNA; 20 BP.  
 XX  
 AC ADO33370;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapper oligo targeted to rabbit Apob - SEQ 818.  
 XX  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; rabbit; ss.  
 XX  
 OS Oryctolagus cuniculus.  
 XX  
 FT modified\_base 1..20  
 FT Location/Qualifiers  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 XX WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;  
 XX WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 42; SEQ ID NO 818; 483bp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,

CC vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,  
 CC endocrine, vasotropic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapper oligo of the invention which is  
 CC targeted to rabbit Apob.  
 XX  
 SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;  
 XX  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 OY 4920 CTGCGTTCTGAATATCAGGC 4939  
 DB 20 CTACGTCCTGAGTATCAGGC 1  
 RESULT 2729  
 ADO33418/c  
 ID ADO33418 standard; DNA; 20 BP.  
 XX  
 AC ADO33418;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense/mismatch 2'-MOE gapper oligo targeted to human Apob SEQ ID 866.  
 XX  
 KW apolipoprotein B; Apob; cardiovascular; antiarteriosclerotic;  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
 KW anabolic; eating disorder; cytostatic; endocrine; vasotropic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapper; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss; mismatch.  
 XX  
 OS Homo sapiens.  
 XX  
 FT modified\_base 1..20  
 FT Location/Qualifiers  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER = Phosphorothioate backbone, bases 1-5 and  
 FT 16-20 2'-MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 FT  
 XX WO200404181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KW;

```

XX DR WPI; 2004-420321/39.
XX
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX PS Example 59; SEQ ID NO 866; 483bp; English.
XX
XX CC The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antidiabetic, antihypertensive, antilipidemic, antidiabetic, anorectic, cardiant,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense/mismatch 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention
XX which is targeted to human ApoB RNA.
XX
SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3249 GGTGGCGAAGCAGACTGAGGC 3268
DB 20 GGTGGCGAATATACTGAGGC 1
RESULT 2730
ADO33369/c
ID ADO33369 standard; DNA; 20 BP.
XX
XX AC ADO33369;
XX
XX 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to rabbit ApoB - SEQ 817.
XX
XX apolipoprotein B; ApoB; cardiovascular; antidiabetic; anorectic; cardiant;
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosolic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX hyperlipoproteinaemia; hyperlipidemia; hypercholesterolaemia;
XX von Gierke's disease; lipodystrophy; Cushing's syndrome;
XX sexual ateliotic dwarfism; hyperthyroidism; hypertension;
XX anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
XX impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
XX obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
XX phosphorothioate backbone; rabbit; ss.
XX
OS Oryctolagus cuniculus.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= OTHER = Phosphorothioate backbone, bases 1-5 and
FT

```

```

FT 16-20 2'-MOE wing bases, all cytidine residues are 5-
FT methylcytidines"
XX
XX PN WO2004044181-A2.
XX
XX PD 27-MAY-2004.
XX
XX 13-NOV-2003; 2003WO-US036411.
XX
XX 13-NOV-2002; 2002US-0426234P.
XX
XX 15-MAY-2003; 2003WO-US015493.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PI Crooke R, Graham M, Lemonidis-Tardet K, Dobie KW;
XX
XX WPI; 2004-420321/39.
XX
XX PT Antisense oligonucleotide compound that inhibits expression of mRNA
XX encoding human apolipoprotein B, useful for treating hyperlipidemia,
XX diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
XX syndrome.
XX
XX PS Example 42; SEQ ID NO 817; 483bp; English.
XX
XX CC The invention relates to a novel antisense compound where the compound
XX hybridises to and inhibits expression of mRNA encoding human
XX apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
XX confluent HepG2 cells in culture at a concentration of 150 nM. The
XX compound of the invention demonstrates cardiovascular,
XX antidiabetic, antihypertensive, antilipidemic, antidiabetic, anorectic, cardiant,
XX endocrine, vasotropic, neuroprotective and nootropic activities and may
XX be useful for inhibiting the expression of apolipoprotein B in cells or
XX tissues in vivo in order to address a condition associated with abnormal
XX lipid or cholesterol metabolism. The compound may be useful for
XX decreasing circulating lipoprotein levels, triglyceride levels,
XX cholesterol levels, lipid levels, fatty acid levels, acute phase
XX reactants and chylomicrons and thus may be utilised during treatment of
XX hyperlipoproteinaemia, hyperlipidemia, hypercholesterolaemia,
XX cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
XX syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
XX anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
XX impotence, obstructive liver disease, Alzheimer's disease, dementia,
XX diabetes, obesity and atherosclerosis. The current sequence is that of an
XX antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
XX targeted to rabbit ApoB.
XX
SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 4911 AATGACGTCGCGCTTCTGA 4930
DB 20 AATGACATTGCTAAGCTGTA 1
RESULT 2731
ADO33366/c
ID ADO33366 standard; DNA; 20 BP.
XX
XX AC ADO33366;
XX
XX 12-AUG-2004 (first entry)
XX
DE Antisense 2'-MOE gapmer oligo targeted to rabbit ApoB - SEQ 814.
XX
XX apolipoprotein B; ApoB; cardiovascular; antidiabetic; anorectic; cardiant;
XX antilipidemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
XX anabolic; eating disorder; cytosolic; endocrine; vasotropic;
XX neuroprotective; nootropic; lipid; cholesterol metabolism;
XX

```

	KM	hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
	KM	von Gierke's disease; lipodystrophy; Cushing's syndrome;
	KW	sexual ateliotic dwarfism; hypertthyroidism; hypertension;
	KM	anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
	KM	impotence; obstructive liver disease; Alzheimer's dementia; diabetes;
	KM	obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
	KM	phosphorothioate backbone; rabbit; ss.
	XX	
	OS	Oryctolagus cuniculus.
	XX	
	FH	Key
	FT	modified_base
	FT	1..20
	FT	/+tag= a
	FT	/mod_base= OTHER
	FT	/note= "OTHER = Phosphorothioate backbone, bases 1-5 and
	FT	16-20 2'-MOE wing bases, all cytidine residues are 5-
	FT	methylcytidines"
	XX	
	PN	WO2004044181-A2.
	PD	
	XX	27-MAY-2004.
	PF	
	XX	13-NOV-2003; 2003WO-US036411.
	XX	
	PR	13-NOV-2002; 2002US-0426234P.
	XX	
	PR	15-MAY-2003; 2003WO-US015493.
	XA	
	PA	(ISIS-) ISIS PHARM INC.
	PB	
	PI	Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KM;
	PT	wpi; 2004-420321/39.
	XX	
	PT	Antisense oligonucleotide compound that inhibits expression of mRNA
	PT	encoding human apolipoprotein B, useful for treating hyperlipidemia,
	PT	diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
	PT	syndrome.
	PS	
	XX	Example 42; SEQ ID NO 814; 483bp; English.
	XX	
	CC	The invention relates to a novel antisense compound where the compound
	CC	hybridises to and inhibits expression of mRNA encoding human
	CC	apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
	CC	confluent HepG2 cells in culture at a concentration of 150 nM. The
	CC	compound of the invention demonstrates cardiovascular.
	CC	antiarteriosclerotic, antilipemic, antidiabetic, anorectic, cardiant,
	CC	vasotrophic, hypotensive, anabolic, eating disorder-related, cyostatic,
	CC	endocrine, vasotropic, neuroprotective and nootropic activities and may
	CC	be useful for inhibiting the expression of apolipoprotein B in cells or
	CC	tissues in vivo in order to address a condition associated with abnormal
	CC	lipid or cholesterol metabolism. The compound may be useful for
	CC	decreasing circulating lipoprotein levels, triglyceride levels,
	CC	cholesterol levels, lipid levels, fatty acid levels, acute phase
	CC	reactants and chylomicrons and thus may be utilised during treatment of
	CC	hyperlipoproteinaemia, hyperlipidemia, hypercholesterolaemia,
	CC	cardiovascular disorders Von Gierke's disease, lipodystrophy, Cushing's
	CC	syndrome, sexual ateliotic dwarfism, hypertthyroidism, hypertension,
	CC	anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
	CC	impotence, obstructive liver disease, Alzheimer's disease, dementia,
	CC	diabetes, obesity and atherosclerosis. The current sequence is that of an
	CC	antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
	CC	targeted to rabbit ApoB.
	XX	
	SO	Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
	Query Match	0.1%; Score 15.2; DB 1; Length 20;
	Best Local Similarity	85.0%; Pred.No.1.9e+03;
	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
0y	4890 GATATGACCTTCTCAAGCA 4909	
db	20 GATCTTACTTTCCAAGCA 1	

RESULT 2732  
 ID ADQ31560 standard; DNA; 20 BP.  
 AC ADQ31560;  
 ADQ31560;  
 DT 21-OCT-2004 (first entry)  
 DE Multiplex detection of human SNPs, primer R4.  
 KW Human; Multiplex nucleic acid detection; ss; PCR; primer; SNP;  
 KW single nucleotide polymorphism.  
 OS Homo sapiens.  
 PN US2004146866-A1.  
 PP 29-JUL-2004.  
 PP 24-JAN-2003; 2003US-00349780.  
 PP 24-JAN-2003; 2003US-00349780.  
 PR 24-JAN-2003; 2003US-00349780.  
 PX (FUGG/) FU G.  
 PX Fu G;  
 PX WPI; 2004-552653/53.  
 DR  
 XX Analyzing multiple targets in polynucleotide, by providing multiple  
 PT primers with target nucleic acid, digesting nucleic acid products with  
 PT cognate restriction enzymes, amplifying digested products, and detecting  
 PT amplified products.  
 PS Example 1; SEQ ID NO 18; 65pp; English.  
 XX  
 XX The invention relates analysing multiple targets in polynucleotide.  
 CC involves providing a set or sets of multiple primers with target nucleic  
 CC acids in separate reactions of primer extension or amplification, where  
 CC the reactions produce nucleic acid products in that each nucleic acid  
 CC fragments comprise at least one restriction site, digesting nucleic acid  
 CC products of the separate reactions on the restriction sites with cognate  
 CC restriction enzymes, joining digested products derived from the separate  
 CC reactions together, where randomly joining nucleic acid fragments from  
 CC the separated reactions are created, amplifying the joined products, and  
 CC detecting the amplified products. Also included are an oligonucleotide  
 CC primer for detecting target nucleic acid sequence (comprising a 3'  
 CC complementary portion and 5' non-complementary portion, where the 5' non-  
 CC complementary portion comprises a restriction enzyme site, where the  
 CC restriction site acts as detection marker in the process of detecting  
 CC target nucleic acid sequence, where the detection signal generated from  
 CC enzymatic manipulation on restriction site of reaction product is  
 CC indicative of the presence of target nucleic acid sequence) and a kit for  
 CC use in analysis and detection of multiple targets in a polynucleotide  
 CC (comprising a set or sets of multiple primers, universal primers,  
 CC restriction enzymes, DNA ligase, DNA polymerase, ddNTP, buffers for all  
 CC enzymes, and dNTPs). The method is useful for analysing multiple targets  
 CC in a polynucleotide and for genotyping mutations, preferably single  
 CC nucleotide polymorphisms (SNPs), and for analysing differential gene  
 CC expression profiles, genomic methylation patterns and any specific  
 CC nucleic acid from any source. The method enables analysis of multiple  
 CC targets quantitatively. An experiment was performed, using the method of  
 CC the invention, where 8 SNPs were detected in human genomic DNA,  
 CC simultaneously. The present sequence is a primer used in the above  
 CC experiment.  
 SO Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+03;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;



QY 3761 CCTGATCAGAGTCCCTG 3780  
 ID 1 CTTGCATCAGTGCCTG 20

RESULT 2733  
 ADR10546/C  
 ID ADR10546 standard; DNA; 20 BP.  
 ADR10546;

21-OCT-2004 (first entry)

PCR primer 2 for amplifying human DNA SNP, ID# IGR2175A\_2.

Haplotype determination; polymorphic site; genotype; disease-associated; pharmacogenomic; pathogenesis; molecular epidemiologic study; primer; ss.

Hom sapiens.

WO2004065617-A2.

05-AUG-2004.

16-JAN-2004; 2004WO-US001329.

17-JAN-2003; 2003US-0441046P.

(UYBO-) UNIV BOSTON.

Cantor CR, Ding C;

WPI; 2004-593485/57.

High throughput haplotype analysis, useful for diagnosing a disease condition, comprises diluting a nucleic acid sample into a single molecule dilution and genotyping by PCR.

Example; SEQ ID NO 44; 33bp; English.

The invention relates to a novel method for determining a haplotype of a subject. The method comprises: diluting a nucleic acid sample from the subject into a single molecule dilution; amplifying the diluted single nucleotide dilution with at least two different primers designed to amplify a region comprising at least two polymorphic sites in the nucleic acid template; genotyping the polymorphic sites in the single nucleic acid molecule; and determining the haplotype from the genotypes of at least two polymorphic sites to obtain a haplotype for the subject. The invention further comprises: a method of diagnosing a disease condition or disease susceptibility by determining a disease related haplotype in a subject, comprising the steps of the method above, and comparing the haplotype of the subject to known diseases-associated haplotypes, where a match in the sample haplotype with a disease-associated haplotype indicates that the subject has the disease or that the subject is susceptible for the disease. The method is useful for determining a haplotype of a subject. The method is used in pharmacogenomic, diseases pathogenesis, and molecular epidemiologic studies, for determining the differences in disease risk or susceptibility, and for determining treatment response between patients. This polynucleotide sequence represents a primer used in the haplotype determining method of the invention.

Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Mismatches 3; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

2164 CCTTGGATTGCTTCAGCT 2183

20 CCTTGGATTGCTTCATCT 1

RESULT 2734  
 ADR22390  
 ID ADR22390 standard; DNA; 20 BP.  
 ADR22390;

18-NOV-2004 (first entry)

Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #2467.

acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity; metabolic syndrome X; cardiovascular disorder; cancer; infection; inflammation; tumour; antisense; ss.

Synthetic.

WO2004016749-A2.

26-FEB-2004.

14-AUG-2003; 2003WO-US025389.

14-AUG-2002; 2002US-0403591P.

(PHAA) PHARMACIA CORP.

Ross SA;

WPI; 2004-203762/19.

New antisense compounds targeted to nucleic acid molecules encoding acyl-coenzyme A synthetase 1 (ACS1), useful for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity or cancer.

Claim 3; SEQ ID NO 2467; 940bp; English.

The invention relates to an antisense compound targeted to a nucleic acid molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense compound specifically hybridizes with and inhibits the expression of ACS1. The antisense oligonucleotides or compounds are useful for inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular disease or cancer. The antisense compounds are also useful as research reagents or kits, or in diagnostic, therapeutic and prophylactic applications, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence represents an acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide.

Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 1.9e+03; Mismatches 3; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

3933 CCAGACTTCACATCCAGA 3952

1 CCAGATTCTCATCTCTAGA 20

RESULT 2735

ADR22801  
 ID ADR22801 standard; DNA; 20 BP.

ADR22801;

18-NOV-2004 (first entry)

Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #2878.

acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity; metabolic syndrome X; cardiovascular disorder; cancer; infection;

```

KW Inflammation; tumour; antisense; ss.
XX Synthetic.
OS
XX MO2004016749-A2.
PN
XX
XX
XX 26-FEB-2004.
PD
XX
PF 14-AUG-2003; 2003MO-US025389.
XX
PR 14-AUG-2002; 2002US-0403591P.
XX
XX (PHAA ) PHARMACIA CORP.
PA
XX
XX Ross SA:
PI
XX WPI; 2004-203782/19.
DR
XX
XX New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT coenzyme A synthetase 1 (ACSL), useful for treating diseases or
PT conditions associated with aberrant expression of ACSL, e.g. diabetes,
PT obesity or cancer.
PS Claim 3; SEQ ID NO 2878; 940bp; English.
XX
XX The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding acyl-coenzyme A synthetase 1 (ACSL). The antisense
CC compound specifically hybridises with and inhibits the expression of
CC ACSL. The antisense oligonucleotides or compounds are useful for
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACSL), and for
CC treating diseases or conditions associated with aberrant expression of
CC ACSL, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular
CC disorder or cancer. The antisense compounds are also useful as research
CC reagents and kits, or in diagnostic, therapeutic and prophylactic
CC applications, e.g. to prevent or delay infection, inflammation or tumour
CC formation. The present sequence represents an acyl-coenzyme A synthetase
CC 1, ACSL, antisense oligonucleotide.
XX
SQ Sequence 20 BP; 7 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3934 CAGACTTCCACATCCAGAA 3953
DB 1 CAGATTTCATCATCTTAGAA 20
RESULT 2736
AAQ33752/C
ID AAQ33752 standard; DNA; 15 BP.
XX
XX AAQ33752;
AC
XX
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Microsatellite sequence from clone TGLA162.
DE
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KM Genetic mapping; crates; amplification; ss.
XX
XX Bos taurus.
OS
XX
XX MO9213102-A1.
PN
XX
XX 06-AUG-1992.
PD
XX
PF 15-JAN-1992; 92MO-US000340.
XX
PR 15-JAN-1991; 91US-00642342.
XX

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PA (GENM-) GENMARK.
XX
XX Georges M, Massey JM;
PI
XX WPI; 1992-284684/34.
DR
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
PT
XX
XX Table 7; Page 231; 517pp; English.
PS
XX
XX The sequence is that of a bovine microsatellite sequence obtd. by
CC screening a library of bovine MboI DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
CC in the bovine genome is estimated at >100,000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPTIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved in the determination of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 15 BP; 5 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 0.1%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 178 TGCTGCTGCTGCTGC 192
DB 15 TGCTGCTGCTGCTGC 1
RESULT 2737
AA66618/C
ID AA66618 standard; RNA; 15 BP.
XX
XX AA66618;
AC
XX
XX 20-JUL-1999 (first entry)
DT
XX
XX Human CD40 hammerhead ribozyme target SEQ ID NO:3250.
DE
XX
XX Arthritic condition; graft tolerance; immune response; target; cleavage;
KM hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KM streptolysin; synovial membrane; joint; arthritis; osteoarthritis;
KM rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KM diagnosis; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9618736-A2.
PN
XX
XX 20-JUN-1996.
PD
XX
XX 22-NOV-1995; 95MO-US015516.
PF
XX
XX 13-DEC-1994; 94US-00354920.
PR 23-DEC-1994; 94US-00363253.
XX 23-DEC-1994; 94US-00363254.
PR 17-FEB-1995; 95US-00390850.
XX 20-APR-1995; 95US-00426124.
PR 02-MAY-1995; 95US-00432874.
XX 04-MAY-1995; 95US-00434509.
PR 07-JUL-1995; 95US-0000951P.
XX 07-JUL-1995; 95US-0000974P.
PR 07-AUG-1995; 95US-00512861.
XX

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PR 05-OCT-1995; 95US-00541365.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PI Belgelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P,  
 PI Mcswigen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J,  
 PI Karpelisky A, Thompson JD, Modak A, Burgin A;  
 DR WPI; 1996-300653/30.  
 XX  
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for  
 PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.  
 XX  
 PS Claim 10; Page 204; 307pp; English.  
 XX  
 CC The present invention describes a novel enzymatic nucleic acid (ENA)  
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and stromelysin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis.  
 CC Particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an alloantigen or a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC stromelysin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 CC  
 XX  
 SQ Sequence 15 BP; 2 A; 5 C; 5 G; 0 T; 3 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 4506 TCCTGGGAGCCACAG 4520  
 15 TCCTGGGAGCCACAG 1  
 RESULT 2738  
 AAX84262  
 ID AAX84262 standard; DNA; 15 BP.  
 XX  
 AC AAX84262;  
 XX  
 XX 08-SEP-1999 (first entry)  
 DT  
 XX  
 DE PCR primer for human Nck associated protein 1 coding sequence.  
 XX  
 KW Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;  
 KW therapy; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN MO9931239-A1.  
 PD 24-JUN-1999.  
 XX  
 PF 14-DEC-1998; 98MO-JP005646.  
 XX  
 PR 15-DEC-1997; 97JP-00363183.  
 XX  
 PA (KYOW ) KYOWA HAKKO KOGYO KK.  
 PA (SAKA/) SAKAKI Y.  
 XX

PI Sakaki Y;  
 XX  
 DR WPI; 1999-395181/33.  
 XX  
 PT Protein inhibiting apoptosis, useful in the diagnosis and treatment of  
 PT Alzheimer's disease.  
 XX  
 PS Example 1; Page 77; 90pp; Japanese.  
 XX  
 CC This sequence represents a PCR primer used to isolate DNA encoding the  
 CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits  
 CC apoptosis. The protein can be used in the investigation, diagnosis and  
 CC treatment (e.g. by gene therapy) of Alzheimer's disease  
 XX  
 SQ Sequence 15 BP; 0 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 177 CTGCTGCTGCTGCTG 191  
 1 CTGCTGCTGCTGCTG 15  
 RESULT 2739  
 AAX84261/c  
 ID AAX84261 standard; DNA; 15 BP.  
 XX  
 AC AAX84261;  
 XX  
 XX 08-SEP-1999 (first entry)  
 DT  
 XX  
 DE PCR primer for human Nck associated protein 1 coding sequence.  
 XX  
 KW Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;  
 KW therapy; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN MO9931239-A1.  
 PD 24-JUN-1999.  
 XX  
 PF 14-DEC-1998; 98MO-JP005646.  
 XX  
 PR 15-DEC-1997; 97JP-00363183.  
 XX  
 PA (KYOW ) KYOWA HAKKO KOGYO KK.  
 PA (SAKA/) SAKAKI Y.  
 XX  
 PI Sakaki Y;  
 XX  
 DR WPI; 1999-395181/33.  
 XX  
 PT Protein inhibiting apoptosis, useful in the diagnosis and treatment of  
 PT Alzheimer's disease.  
 XX  
 PS Example 1; Page 77; 90pp; Japanese.  
 XX  
 CC This sequence represents a PCR primer used to isolate DNA encoding the  
 CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits  
 CC apoptosis. The protein can be used in the investigation, diagnosis and  
 CC treatment (e.g. by gene therapy) of Alzheimer's disease  
 XX  
 SQ Sequence 15 BP; 5 A; 5 C; 5 G; 0 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Db 177 CTGCTGCTGCTGCTG 191

```

DB      15  |||||
          CTGCTGCTGCTGCTG 1

RESULT 2740
AAZ36369
ID      AAZ36369 standard; DNA; 15 BP.
XX
AC      AAZ36369;
XX
DT      22-FEB-2000 (first entry)
XX
DE      PCR primer used to amplify mouse testatin cDNA.
XX
KW      Mouse; cystatin-related protein; testatin; testis formation;
KW      foetal gonad; testis tumour growth; tumour inhibiting cystatin;
KW      genital tumour; testis malformation; PCR primer; ss.
XX
OS      Synthetic.
XX
PN      WO958565-A1.
XX
PD      18-NOV-1999.
XX
PF      06-MAY-1999; 99WO-SF000764.
XX
PR      08-MAY-1998; 98SE-00001617.
XX
PA      (KARO-) KAROLINSKA INNOVATIONS AB.
XX
PI      Nordqvist K, Toehonen V;
XX
DR      WPI; 2000-039071/03.
XX
PT      Novel cystatin-related protein used for testis tumor diagnostics and
PT      treatment.
XX
PS      Example 1; Page 15; 37pp; English.
XX
CC      The present sequence represents PCR primer used to amplify cDNA encoding
CC      a mouse cystatin-related protein, designated testatin. The protein is
CC      capable of inducing testis formation in foetal gonads. It is highly
CC      probable that the protein inhibits testis tumour growth because of
CC      structural and functional similarities with tumour inhibiting cystatins.
CC      The cystatin-related protein testatin may be useful for inducing testis
CC      formation in foetal gonads. Testatin polynucleotides are useful as a
CC      source of primers and probes, which can be used to detect the presence of
CC      testatin nucleic acid molecules in a sample. The testatin
CC      polynucleotides, polypeptides, and compositions can be used for treating
CC      genital tumours and may also be useful for creating a model for studying
CC      testis malformations
XX
SQ      Sequence 15 BP; 0 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
QY      Query Match 0.1%; Score 15; DB 1; Length 15;
      Best Local Similarity 100.0%; Pred. No. 1.4e+03;
      Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DB      177  CTGCTGCTGCTGCTG 191
      1  CTGCTGCTGCTGCTG 15
XX
RESULT 2741
AAFA5343
ID      AAFA5343 standard; DNA; 15 BP.
XX
AC      AAFA5343;
XX
DT      30-MAR-2001 (first entry)
XX
DE      IGFBP2 oligonucleotide #182.

```

```

XX      Antiense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW      cytostatic; dermatological; cardiant; vitrucide; ophthalmological; keloid;
KW      skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW      IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW      growth factor mediated cell proliferation; ichthyosis; seborrhoea; ruba;
KW      keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW      hyperneovascular condition; hyperplasia; kidney disease;
KW      neovascular condition of the retina; ss.
XX
OS      Homo sapiens.
XX
PN      WO200078341-A1.
XX
PD      28-DEC-2000.
XX
PF      21-JUN-2000; 2000MO-AU000693.
XX
PR      21-JUN-1999; 99US-0140345P.
XX
PA      (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI      Wraight CJ, Werther GA, Edmondson SR;
XX
DR      WPI; 2001-041421/05.
XX
PT      Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT      UV (ultra-violet) treatment (optional) and an antisease nucleic acid that
PT      inhibits or reduces growth factor mediated cell proliferation and/or
PT      inflammation.
XX
PS      Example 6; Page 35; 201pp; English.
XX
CC      The present invention relates to a method for ameliorating the effects of
CC      skin disorders. The method comprises contacting the skin with an
CC      antisease oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC      receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC      inhibiting or reducing growth factor mediated cell proliferation.
CC      inflammation and/or other disorders. The present sequence is an
CC      oligonucleotide which can be used to design the antisease
CC      oligonucleotides of the present invention (see AAFA5151 and AAFA5153-
CC      F5161). The method is useful for ameliorating the effects of psoriasis,
CC      ichthyosis, pityriasis, ruba, pilaris, seborrhoea, keloids, keratosis,
CC      neoplasia, scleroderma, warts, benign growths, cancers of the skin, a
CC      hyperneovascular condition such as a neovascular condition of the retina,
CC      brain or skin, growth factor-mediated malignancies, other sclerotic
CC      disease, kidney disease, hyperproliferation of the inside of blood
CC      vessels or any other hyperplasia
XX
SQ      Sequence 15 BP; 0 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
QY      Query Match 0.1%; Score 15; DB 1; Length 15;
      Best Local Similarity 100.0%; Pred. No. 1.4e+03;
      Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DB      175  CGCTGCTGCTGCTGC 189
      1  CGCTGCTGCTGCTGC 15
XX
RESULT 2742
AAFA5344
ID      AAFA5344 standard; DNA; 15 BP.
XX
AC      AAFA5344;
XX
DT      30-MAR-2001 (first entry)
XX
DE      IGFBP2 oligonucleotide #183.
XX
KW      Antisease therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW      cytostatic; dermatological; cardiant; vitrucide; ophthalmological; keloid;
KW      skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;

```

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;  
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;  
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;  
 KW hyperneovascular condition; hyperplasia; kidney disease;  
 KW neovascular condition of the retina; ss.  
 OS Homo sapiens.  
 XX WO200078341-A1.  
 XX 28-DEC-2000.  
 XX 21-JUN-2000; 2000MO-AU000693.  
 XX 21-JUN-1999; 99US-0140345P.  
 XX (MURDOCH CHILDRENS RES INST.  
 XX Wraight CJ, Werther GA, Edmondson SR;  
 XX WPI; 2001-041421/05.  
 XX  
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering  
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that  
 XX inhibits or reduces growth factor mediated cell proliferation and/or  
 XX inflammation.  
 XX  
 XX Example 6; Page 35; 201pp; English.  
 XX  
 XX The present invention relates to a method for ameliorating the effects of  
 XX skin disorders. The method comprises contacting the skin with an  
 XX antisense oligonucleotide, (for insulin-like growth factor [IGF]-1  
 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of  
 XX inhibiting or reducing growth factor mediated cell proliferation,  
 XX inflammation and/or other disorders. The present sequence is an  
 XX oligonucleotide which can be used to design the antisense  
 XX oligonucleotides of the present invention (see AAF45151 and AAF45153-  
 XX F45161). The method is useful for ameliorating the effects of psoriasis,  
 XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,  
 XX neoplasia, scleroderma, warts, benign growths, cancers of the skin, a  
 XX hyperneovascular condition such as a neovascular condition of the retina,  
 XX brain or skin, growth factor-mediated malignancies, other sclerotic  
 XX disease, kidney disease, hyperproliferation of the inside of blood  
 XX vessels or any other hyperplasia  
 XX  
 XX Sequence 15 BP; 0 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 176 GCTGCTGCTGCTGCT 190  
 Db 1 GCTGCTGCTGCTGCT 15  
 RESULT 2743  
 ADO81156  
 ID ADO81156 standard; DNA; 15 BP.  
 XX  
 AC ADO81156;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Prion protein polymorphic microsatellite marker consensus sequence #34.  
 XX  
 KW gene typing; polymorphic microsatellite loci; PMU;  
 KW disease predisposition; microsatellite marker; prion disease;  
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;  
 KW milk protein; hormone; transcription factor; PT7-blue-vector; sheep;  
 KW microsatellite; ds.  
 XX  
 OS Synthetic.  
 PF

XX  
 XX DE10236711-A1.  
 XX 26-FEB-2004.  
 XX  
 XX 09-AUG-2002; 2002DE-01036711.  
 XX  
 XX 09-AUG-2002; 2002DE-01036711.  
 XX  
 XX (UHO-) UNIV HOHENHEIM.  
 XX  
 XX Geldermann H, Preuss S, Han Y;  
 XX WPI; 2004-215730/21.  
 XX  
 XX Typing genes that contain polymorphic microsatellite loci, useful for  
 XX identifying predisposition to disease, by amplification and determining  
 XX length of amplicons.  
 XX  
 XX Claim 9; Page 50; 64pp; German.  
 XX  
 XX The invention describes a method of typing (M1) a gene (I) that has one  
 XX or more polymorphic microsatellite loci (PML). The method comprises: PCR  
 XX amplification of at least one DNA region of (I) that includes PML, using  
 XX as template a DNA sample containing at least one segment of (I); and  
 XX determining the length of the resulting amplicon(s). Also described are:  
 XX a method of determining (M2) microsatellite markers (MM) for  
 XX predisposition to a disease, associated with a gene that includes one or  
 XX more PML; and predisposition (M3) of diseases associated with gene that  
 XX include PML. The method is used to identify microsatellite markers, in a  
 XX disease-related gene, that are associated with a predisposition to  
 XX diseases and for diagnosis of such diseases, especially prion diseases  
 XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and  
 XX metabolic diseases; also to type genes that encode milk proteins;  
 XX hormones or transcription factors. The method is simpler, quicker and  
 XX particularly less expensive than known methods based on sequencing. This  
 XX sequence represents a prion protein polymorphic microsatellite marker  
 XX consensus sequence.  
 XX  
 XX Sequence 15 BP; 0 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 177 CTGCTGCTGCTGCTG 191  
 Db 1 CTGCTGCTGCTGCTG 15  
 RESULT 2744  
 ADO81136/C  
 ID ADO81136 standard; DNA; 15 BP.  
 XX  
 AC ADO81136;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Prion protein polymorphic microsatellite marker consensus sequence #14.  
 XX  
 KW gene typing; polymorphic microsatellite loci; PMU;  
 KW disease predisposition; microsatellite marker; prion disease;  
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;  
 KW milk protein; hormone; transcription factor; PT7-blue-vector; sheep;  
 KW microsatellite; ds.  
 XX  
 OS Synthetic.  
 XX  
 XX DE10236711-A1.  
 XX 26-FEB-2004.  
 XX  
 XX 09-AUG-2002; 2002DE-01036711.  
 XX

XX 09-AUG-2002; 2002DS-01036711.  
 PR (UYHO-) UNIV HOHENHEIM.  
 PA  
 XX  
 PI Geldermann H, Preuse S, Han Y;  
 XX  
 DR WPI; 2004-215730/21.  
 XX  
 PT Typing genes that contain polymorphic microsatellite loci, useful for  
 PT identifying predisposition to disease, by amplification and determining  
 PT length of amplicons.  
 XX  
 PS Claim 9; Page 50; 64pp; German.  
 XX  
 CC The invention describes a method of typing (M1) a gene (I) that has one  
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR  
 CC amplification of at least one DNA region of (I) that includes PML, using  
 CC as template a DNA sample containing at least one segment of (I); and  
 CC determining the length of the resulting amplicon(s). Also described are:  
 CC a method of determining (M2) microsatellite markers (MM) for  
 CC predisposition to a disease, associated with a gene that includes one or  
 CC more PML; and prediagnosis (M3) of diseases associated with gene that  
 CC include PML. The method is used to identify microsatellite markers, in a  
 CC disease-related gene, that are associated with a predisposition to  
 CC diseases and for prediagnosis of such diseases, especially prion diseases  
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and  
 CC metabolic diseases; also to type genes that encode milk proteins,  
 CC hormones or transcription factors. The method is simpler, quicker and  
 CC particularly less expensive than known methods based on sequencing. This  
 CC sequence represents a prion protein polymorphic microsatellite marker  
 CC consensus sequence.  
 CC  
 SQ Sequence 15 BP; 5 A; 5 C; 5 G; 0 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 DB 176 GCTGCTGCTGCTGCT 190  
 15 GCTGCTGCTGCTGCT 1  
 RESULT 2745  
 AD033425/c  
 ID AD033425 standard; DNA; 15 BP.  
 XX  
 AC AD033425;  
 XX  
 DT 12-AUG-2004 (first entry)  
 XX  
 DE Antisense 2'-MOE gapmer oligo targeted to human Apob - SEQ ID 873.  
 XX  
 KW antilipemic; antidiabetic; anorectic; cardiant; vasotrophic; hypotensive;  
 KW anabolic; eating disorder; cyrostatic; endocrine; vasotrophic;  
 KW neuroprotective; nootropic; lipid; cholesterol metabolism;  
 KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;  
 KW Von Gierke's disease; lipodystrophy; Cushing's syndrome;  
 KW sexual ateliotic dwarfism; hyperthyroidism; hypertension;  
 KW anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;  
 KW impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;  
 KW obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;  
 KW phosphorothioate backbone; human; chromosome 2p23-2p24; ss;  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER

PT /note= "OTHER = Phosphorothioate backbone except for  
 FT phosphodiester linkage between bases 5 and 6, bases 1-5 2'  
 FT -MOE wing bases, all cytidine residues are 5-  
 FT methylcytidines"  
 XX  
 PN WO2004044181-A2.  
 XX  
 PD 27-MAY-2004.  
 XX  
 PF 13-NOV-2003; 2003WO-US036411.  
 XX  
 PR 13-NOV-2002; 2002US-0426234P.  
 PR 15-MAY-2003; 2003WO-US015493.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Crooke R, Graham M, Lemonidis-Tarbet K, Dobie KM;  
 XX  
 DR WPI; 2004-420321/39.  
 XX  
 PT Antisense oligonucleotide compound that inhibits expression of mRNA  
 PT encoding human apolipoprotein B, useful for treating hyperlipidaemia,  
 PT diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's  
 PT syndrome.  
 XX  
 PS Example 59; SEQ ID NO 873; 483pp; English.  
 XX  
 CC The invention relates to a novel antisense compound where the compound  
 CC hybridises to and inhibits expression of mRNA encoding human  
 CC apolipoprotein B (Apob) after 16-24 hours by at least 30% in 80%  
 CC confluent HepG2 cells in culture at a concentration of 150 nM. The  
 CC compound of the invention demonstrates cardiovascular,  
 CC antihypertensive, antidiabetic, anorectic, cardiant,  
 CC vasotropic, hypotensive, anabolic, eating disorder-related, cyrostatic,  
 CC endocrine, vasotrophic, neuroprotective and nootropic activities and may  
 CC be useful for inhibiting the expression of apolipoprotein B in cells or  
 CC tissues in vivo in order to address a condition associated with abnormal  
 CC lipid or cholesterol metabolism. The compound may be useful for  
 CC decreasing circulating lipoprotein levels, triglyceride levels,  
 CC cholesterol levels, lipid levels, fatty acid levels, acute phase  
 CC reactants and chylomicrons and thus may be utilised during treatment of  
 CC hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,  
 CC cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's  
 CC syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,  
 CC anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,  
 CC impotence, obstructive liver disease, Alzheimer's disease, dementia,  
 CC diabetes, obesity and atherosclerosis. The current sequence is that of an  
 CC antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is  
 CC targeted to human Apob RNA.  
 CC  
 SQ Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 1.4e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 DB 3254 GAAGCAGACTGAGGC 3268  
 15 GAAGCAGACTGAGGC 1  
 RESULT 2746  
 AAT76866  
 ID AAT76866 standard; DNA; 16 BP.  
 XX  
 AC AAT76866;  
 XX  
 DT 07-FEB-1998 (first entry)  
 XX  
 DE 5'-5' triplex-forming oligonucleotide part 1 (nucleotides 1-16).  
 XX  
 KW hairpin triplex-forming oligonucleotide; duplex-forming region; linker;  
 KW pyrimidine; target; antigenic; antisense; modulate; expression; therapy;

KW viral; bacterial; fungal; protozoal; infection; cancer; abnormal; ss.  
 XX Synthetic.  
 OS  
 KW Key modified\_base 16 Location/Qualifiers  
 FH /tag= b  
 FT /note= "5'-5' linkage with nucleotide 1 of AAT76867"  
 EN WO9635706-A1.  
 PD 14-NOV-1996.  
 XX  
 PF 10-MAY-1996; 96WO-US006718.  
 XX  
 PR 11-MAY-1995; 95US-00438975.  
 XX  
 PA (HYBR-) HYBRIDON INC.  
 XX  
 PI Kandimalia ER, Agrawal S;  
 DR WPI; 1996-518611/51.  
 XX  
 PT New hairpin triplex-forming oligo:nucleotide targets a pyrimidine region  
 PT - has triplex forming and duplex forming regions connected by a linker,  
 PT combines properties of anti-gene and anti-sense molecules.  
 XX  
 PS Claim 9; Page 15; 48pp; English.  
 XX  
 CC New hairpin triplex-forming oligonucleotides comprise a duplex-forming  
 CC region (DPR), a triplex-forming region (TFR) and a linker (L). The DPR is  
 CC complementary to a pyrimidine region of target nucleic acid (1) so it can  
 CC hybridise both with DFR, forming a hairpin duplex, and with the duplex  
 CC formed between DFR and the target region (forming a triplex). DPR and TFR  
 CC have opposite polarity and are connected by L. The hairpin triplex-  
 CC forming oligonucleotides which combine functions of antigene and  
 CC antisense molecules, are used to modulate expression of (1) that includes  
 CC a homopyridine sequence, e.g. for in vivo or in vitro gene modulation  
 CC studies (as an alternative to modulating genes by deletion mutation) or  
 CC for therapeutic purposes, e.g. in cases of viral (esp. HIV), bacterial,  
 CC fungal, protozoal etc. infections, cancer, or generally any disease  
 CC associated with abnormal cell proteins. The present sequence is a part of  
 CC a claimed triplex-forming oligonucleotide. The oligonucleotide exists in  
 CC parallel double helical hairpin structure under experimental conditions.  
 CC In the presence of a single-stranded pyrimidine target sequence that is  
 CC complementary to the purine strand, however, the oligonucleotide forms an  
 CC antiparallel duplex via Watson-Crick hydrogen bonding. The pyrimidine  
 CC strand of the oligonucleotide remains bound in the major groove of the  
 CC antiparallel duplex in parallel fashion to the purine strand through  
 CC Hoogsteen hydrogen bonding  
 CC  
 XX  
 SQ Sequence 16 BP; 12 A; 0 C; 4 G; 0 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 15; DB 1; Length 16;  
 DB Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 3472 AGGAAGAAAGAAAA 3486  
 DB 1 AGGAAGAAAGAAAA 15  
 XX  
 RESULT 2747  
 AAT76868  
 ID AAT76868 standard; DNA; 16 BP.  
 AC AAT76868;  
 XX  
 DT 07-FEB-1998 (first entry)  
 XX  
 DE Target strand for triplex-forming oligonucleotide.

KW hairpin triplex-forming oligonucleotide; duplex-forming region; linker;  
 KW pyrimidine; target; antigene; antisense; modulate; expression; therapy;  
 KW viral; bacterial; fungal; protozoal; infection; cancer; abnormal; ss.  
 OS Synthetic.  
 XX  
 KW Key modified\_base 16 Location/Qualifiers  
 FH /tag= b  
 FT  
 EN WO9635706-A1.  
 PD 14-NOV-1996.  
 XX  
 PF 10-MAY-1996; 96WO-US006718.  
 XX  
 PR 11-MAY-1995; 95US-00438975.  
 XX  
 PA (HYBR-) HYBRIDON INC.  
 XX  
 PI Kandimalia ER, Agrawal S;  
 DR WPI; 1996-518611/51.  
 XX  
 PT New hairpin triplex-forming oligo:nucleotide targets a pyrimidine region  
 PT - has triplex forming and duplex forming regions connected by a linker,  
 PT combines properties of anti-gene and anti-sense molecules.  
 XX  
 PS Example 2; Page 15; 48pp; English.  
 XX  
 CC New hairpin triplex-forming oligonucleotides comprise a duplex-forming  
 CC region (DPR), a triplex-forming region (TFR) and a linker (L). The DPR is  
 CC complementary to a pyrimidine region of target nucleic acid (1) so it can  
 CC hybridise both with DFR, forming a hairpin duplex, and with the duplex  
 CC formed between DFR and the target region (forming a triplex). DPR and TFR  
 CC have opposite polarity and are connected by L. The hairpin triplex-  
 CC forming oligonucleotides which combine functions of antigene and  
 CC antisense molecules, are used to modulate expression of (1) that includes  
 CC a homopyridine sequence, e.g. for in vivo or in vitro gene modulation  
 CC studies (as an alternative to modulating genes by deletion mutation) or  
 CC for therapeutic purposes, e.g. in cases of viral (esp. HIV), bacterial,  
 CC fungal, protozoal etc. infections, cancer, or generally any disease  
 CC associated with abnormal cell proteins. The present sequence is a DNA  
 CC target strand and forms stable triplexes with the claimed triplex-  
 CC forming oligos (see AAT76864-67)  
 CC  
 XX  
 SQ Sequence 16 BP; 12 A; 0 C; 4 G; 0 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 15; DB 1; Length 16;  
 DB Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 3472 AGGAAGAAAGAAAA 3486  
 DB 1 AGGAAGAAAGAAAA 15  
 XX  
 RESULT 2748  
 AAT76864  
 ID AAT76864 standard; DNA; 16 BP.  
 AC AAT76864;  
 XX  
 DT 07-FEB-1998 (first entry)  
 XX  
 DE 3'-3' triplex-forming oligonucleotide part 1 (nucleotides 1-16).  
 XX  
 KW hairpin triplex-forming oligonucleotide; duplex-forming region; linker;  
 KW pyrimidine; target; antigene; antisense; modulate; expression; therapy;  
 KW viral; bacterial; fungal; protozoal; infection; cancer; abnormal; ss.  
 OS Synthetic.  
 XX  
 KW Key modified\_base 16 Location/Qualifiers  
 FH /tag= b  
 FT

/note= "3'-3' linkage with nucleotide 21 of AAT76865"

FT XX MO9635706-A1.  
 PN XX  
 XX 14-NOV-1996.  
 PD XX  
 XX 10-MAY-1996; 96WO-US006718.  
 PF XX  
 XX 11-MAY-1995; 95US-00438975.  
 PR XX  
 XX (HYBR-) HYBRIDON INC.  
 PA XX  
 XX Kandimalia ER, Agrawal S;  
 PI XX  
 XX WPI, 1996-518611/51.  
 DR XX  
 XX New hairpin triplex-forming oligo:nucleotide targets a pyrimidine region  
 PT - has triplex forming and duplex forming regions connected by a linker,  
 PT combines properties of anti-gene and anti-sense molecules.  
 PS XX  
 XX Claim 8; Page 15; 48pp; English.

CC New hairpin triplex-forming oligonucleotides comprise a duplex-forming  
 CC region (DFR), a triplex-forming region (TFR) and a linker (L). The DFR is  
 CC complementary to a pyrimidine region of target nucleic acid (T) so it can  
 CC hybridize to this region, while the TFR is complementary to DFR and able  
 CC to hybridize both with DFR, forming a hairpin duplex, and with the duplex  
 CC formed between DFR and the target region (forming a triplex). DFR and TFR  
 CC have opposite polarity and are connected by L. The hairpin triplex-  
 CC forming oligonucleotides which combine functions of antigenic and  
 CC antisense molecules, are used to modulate expression of (I) that includes  
 CC a homopyridine sequence, e.g. for in vivo or in vitro gene modulation  
 CC studies (as an alternative to modulating genes by deletion mutation) or  
 CC for therapeutic purposes, e.g. in cases of viral (esp. HIV), bacterial,  
 CC fungal, protozoal etc. infections, cancer, or generally any disease  
 CC associated with abnormal cell proteins. The present sequence is a part of  
 CC a claimed triplex-forming oligonucleotide. The oligonucleotide exists in  
 CC parallel double helical hairpin structure under experimental conditions.  
 CC In the presence of a single-stranded pyrimidine target sequence that is  
 CC complementary to the purine strand, however, the oligonucleotide forms an  
 CC antiparallel duplex via Watson-Crick hydrogen bonding. The pyrimidine  
 CC strand of the oligonucleotide remains bound in the major groove of the  
 CC antiparallel duplex in parallel fashion to the purine strand through  
 CC Hoogsteen hydrogen bonding  
 CC XX

Sequence 16 BP; 12 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3472 ACGAAGAAAGAAAA 3486  
 DB 1 ACGAAGAAAGAAAA 15

RESULT 2749  
 AAT76863/C  
 ID AAT76863 standard; DNA; 16 BP.  
 AC AAT76863;  
 XX  
 XX 07-FEB-1998 (first entry)  
 DT XX  
 XX Target strand for triplex-forming oligonucleotide.  
 DE XX  
 XX hairpin triplex-forming oligonucleotide; duplex-forming region; linker;  
 KM pyrimidine; target; antigenic; antisense; modulate; expression; therapy;  
 KM viral; bacterial; fungal; protozoal; infection; cancer; abnormal; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN MO9635706-A1.

XX 14-NOV-1996.  
 PD XX  
 XX 10-MAY-1996; 96WO-US006718.  
 PF XX  
 XX 11-MAY-1995; 95US-00438975.  
 PR XX  
 XX (HYBR-) HYBRIDON INC.  
 PA XX  
 XX Kandimalia ER, Agrawal S;  
 PI XX  
 XX WPI, 1996-518611/51.  
 DR XX  
 XX New hairpin triplex-forming oligo:nucleotide targets a pyrimidine region  
 PT - has triplex forming and duplex forming regions connected by a linker,  
 PT combines properties of anti-gene and anti-sense molecules.  
 PS XX  
 XX Example 2; Page 15; 48pp; English.

CC New hairpin triplex-forming oligonucleotides comprise a duplex-forming  
 CC region (DFR), a triplex-forming region (TFR) and a linker (L). The DFR is  
 CC complementary to a pyrimidine region of target nucleic acid (T) so it can  
 CC hybridize to this region, while the TFR is complementary to DFR and able  
 CC to hybridize both with DFR, forming a hairpin duplex, and with the duplex  
 CC formed between DFR and the target region (forming a triplex). DFR and TFR  
 CC have opposite polarity and are connected by L. The hairpin triplex-  
 CC forming oligonucleotides which combine functions of antigenic and  
 CC antisense molecules, are used to modulate expression of (I) that includes  
 CC a homopyridine sequence, e.g. for in vivo or in vitro gene modulation  
 CC studies (as an alternative to modulating genes by deletion mutation) or  
 CC for therapeutic purposes, e.g. in cases of viral (esp. HIV), bacterial,  
 CC fungal, protozoal etc. infections, cancer, or generally any disease  
 CC associated with abnormal cell proteins. The present sequence is a DNA  
 CC target strand and forms stable triplexes with the claimed triplex-  
 CC forming oligos (see AAT76864-67)  
 CC XX

Sequence 16 BP; 0 A; 4 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3472 ACGAAGAAAGAAAA 3486  
 DB 16 ACGAAGAAAGAAAA 2

RESULT 2750  
 AAZ44998  
 ID AAZ44998 standard; DNA; 16 BP.  
 AC AAZ44998;  
 XX  
 XX 27-APR-2000 (first entry)  
 DT XX  
 XX Murine IgG1 constant region PCR primer #1.  
 DE XX  
 XX IgG1; immunoglobulin G; murine; PCR primer; constant region; transgenic;  
 KM immunoglobulin E; IgE; heavy chain; allergen; plant pollen; fungal spore;  
 KM house dust mite; insect poison; foodstuff; ss.  
 XX  
 OS Mus sp.  
 XX  
 XX DE19828377-A1.  
 PN XX  
 XX 30-DEC-1999.  
 PD XX  
 XX 25-JUN-1998; 98DE-01028377.  
 PF XX  
 XX 25-JUN-1998; 98DE-01028377.  
 PR XX  
 XX (YUPP/) YU P.  
 XX



PI Yu P;  
XX WPI; 2000-137877/13.  
XX A transgenic non-human mammal expressing immunoglobulin E heavy chain,  
PT useful for testing of anti-human IgE antibodies.  
PS Disclosure; Page 6; 10pp; German.  
XX  
XX This invention describes a novel transgenic non-human mammal (1) which  
CC comprises human immunoglobulin E (IgE) heavy chain (II) in place of an  
CC endogenous Ig heavy chain gene at the immunoglobulin gene locus,  
CC the resulting expression of the endogenous gene. (1) is useful for the  
CC testing of medicaments, especially anti-human IgE antibodies or peptides  
CC with binding specificity against human IgE or against molecules that can  
CC interact with human IgE in humans. Anti-Fcεpsilon1 or RII antibodies and  
CC antisense oligonucleotides against the human IgE heavy chain gene can  
CC also be tested on (1). Allergen-specific humanized IgE antibodies are  
CC useful for in vitro diagnosis as an allergen-specific human IgE standard  
CC to quantify concentrations of allergen-specific IgE. The allergen can be  
CC plant pollen, fungal spores, house dust mites and pets or their metabolic  
CC products, insect poisons and foodstuffs. This sequence represents a PCR  
CC primer used to amplify the murine IgG1 constant region which is used in  
CC the method of the invention  
XX  
SQ Sequence 16 BP; 3 A; 3 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 1.5e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 752 CCTGGGGCAGTGTGA 766  
Db 1 CCTGGGGCAGTGTGA 15  
RESULT 2751  
AAT11553  
ID AAT11553 standard; DNA; 17 BP.  
XX  
AC AAT11553;  
XX  
DT 27-AUG-2003 (revised)  
DT 18-APR-1996 (first entry)  
XX  
DE Probe for tumour rejection antigen precursor Melan-A.  
XX  
KW Tumour rejection antigen precursor; TRAP; TRA; melanoma; cancer; tumour;  
KW treatment; detection; vaccine; HLA-A2; adoptive transfer; T cell;  
KW T lymphocyte; human leukocyte antigen; ss.  
OS Synthetic.  
XX  
PN WO9601557-A1.  
XX  
PD 25-JAN-1996.  
XX  
PE 27-JUN-1995; 95WO-US0008153.  
XX  
PR 08-JUL-1994; 94US-00272351.  
PR 10-JAN-1995; 95US-00370319.  
XX  
PA (LUDW-) LUDWIG INST CANCER RES.  
XX  
PI Brichard V, Van Pel A, Coulie P, Boon-Falleur T, De Plaen E;  
PI Traversari C, Wollet T;  
XX  
DR WPI; 1996-097390/10.  
XX  
PT Genomic DNA encoding a tumour rejection antigen precursor - processed to  
PT antigen presented by HLA-A2, useful for treating or diagnosing melanoma.  
XX  
PS Claim 22; Page 24; 41pp; English.

XX  
CC The tumour rejection antigen precursor (TRAP) is processed to a tumour  
CC rejection antigen (TRA) presented by HLA-A2 molecules. TRA is used to  
CC generate cytotoxic T lymphocytes for treating cancer (esp. melanoma). It  
CC can also be used to raise specific antibodies, and when complexed with  
CC HLA-A2, it can be used to produce vaccines. Cytotoxic T lymphocytes so  
CC generated can be used in adoptive transfer or generated, or they can be  
CC using TRA or TRAP together with an adjuvant that facilitates entry into  
CC HLA-A2 presenting cells. Diagnostic methods involving the detection of  
CC expression of the TRAP (Melan-A) using the probes described in AAT11552  
CC and AAT11553 can be used in the detection of cancers. (Updated on 27-AUG-  
CC 2003 to correct OS field.)  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.6e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 499 CAGCCATGTCACGT 513  
Db 2 CAGCCATGTCACGT 16  
RESULT 2752  
ABN01467/c  
ID ABN01467 standard; DNA; 17 BP.  
XX  
AC ABN01467;  
XX  
DT 29-MAY-2002 (first entry)  
XX  
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1459.  
XX  
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KW skeletal muscle disorder; amplicon; screening; ss.  
OS Homo sapiens.  
XX  
PN MO200192524-A2.  
XX  
PD 06-DEC-2001.  
XX  
PE 25-MAY-2001; 2001WO-US016981.  
XX  
PR 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0268660P.  
XX  
PA (ABOM-) ABOMICA INC.  
XX  
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.  
XX  
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
XX

PS Disclosure; SEQ ID NO 1459; 214pp; English.

XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
CC  
CC  
SQ Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.6e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1507 CCCAGAGCTGCTGG 1521  
Db 15 CCCAGAGCTGCTGG 1

RESULT 2753  
ABN01465/c  
ID ABN01465 standard; DNA; 17 BP.

XX  
XX ABN01465;  
AC  
XX  
XX 29-MAY-2002 (first entry)  
DT  
XX  
XX Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1457.  
DE  
XX  
XX Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KM muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KM skeletal muscle disorder; amplicon; screening; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200192524-A2.  
PN  
XX  
XX 06-DEC-2001.  
PD  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
PF  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-0266860P.

XX  
XX (AEOM-) AEOMICA INC.  
PA  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
PI  
XX  
XX WPI; 2002-179446/23.  
DR  
XX  
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption/ionization, comprises human myosin-like protein hGDMLP-1.  
PS  
XX  
XX Disclosure; SEQ ID NO 1457; 214pp; English.

XX  
XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
CC nucleic acids can be used as probes to detect, characterise and quantify  
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
CC -1 proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequence  
CC  
CC  
SQ Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.6e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1507 CCCAGAGCTGCTGG 1521  
Db 17 CCCAGAGCTGCTGG 3

RESULT 2754  
ABN01466/c  
ID ABN01466 standard; DNA; 17 BP.

XX  
XX ABN01466;  
AC  
XX  
XX 29-MAY-2002 (first entry)  
DT  
XX  
XX Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1458.  
DE  
XX  
XX Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
KM muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
KM skeletal muscle disorder; amplicon; screening; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200192524-A2.  
PN  
XX  
XX 06-DEC-2001.  
PD  
XX  
XX 25-MAY-2001; 2001WO-US016981.  
PF  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.

```

PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860D.
XX
PA (AEOMI-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 1458; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.6e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1507 CCCAGAGAGCTGCTGG 1521
Db 16 CCCAGAGAGCTGCTGG 2
XX
RESULT 2755
ABK56790
ID ABK56790 standard; RNA; 17 BP.
XX
AC ABK56790;
XX
DT 02-JUN-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #1161.
XX
KW Human: chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.

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XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTAX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswigen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grube A;
XX WPI; 2002-217145/27.
XX
DR Enzymatic polynucleotide that down regulates expression of chloride
XX channel calcium activated gene, useful for treating Chronic obstructive
XX PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 81; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 3 A; 9 C; 2 G; 0 T; 3 U; 0 Other;
XX
Query Match 0.1%; Score 15; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 1.6e+03;
Matches 13; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 3083 CTCACAGACTCCGC 3097
Db 3 CTCACAGACTCCGC 17
XX
RESULT 2756
ACN64557/c
ID ACN64557 standard; DNA; 17 BP.
XX
AC ACN64557;
XX
DT 02-DEC-2004 (first entry)
XX
DE Human GDMLP-1 probe SEQ ID NO:1459.
XX
KW Human: ss; probe; myosin-like protein-1; hGDMLP-1;
KW hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;
KW skeletal muscle function.
XX
OS Homo sapiens.
XX
PN US2004137589-A1.

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PD 15-JUL-2004.
XX
PF 26-NOV-2003; 2003US-00723361.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
PR 25-MAY-2001; 2001US-00866108.
XX
PA (GUYV/) GU Y.
PA (JIYV/) JI Y.
PA (PENN/) PENN S G.
PA (HANZ/) HANZEL D K.
PA (RANK/) RANK D.
PA (CHEN/) CHEN W.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;
XX WPI; 2004-533378/51.
XX
PT Novel myosin-like protein-1, useful for treating or preventing disorder
PT associated with decreased expression or activity of human genome-derived
PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle
PT function.
XX
PS Disclosure; SEQ ID NO 1459; Opp; English.
XX
CC The invention relates to a novel polypeptide (I) comprising a sequence
CC (S1) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully
CC defined in the specification, a fragment of at least 8 amino acids of
CC (S1), 95% deviation from (S1) which are conservative substitutions, and
CC 65% identity to (S1). A polypeptide of the invention acts as a agonist or
CC antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A
CC pharmaceutical composition of the invention is useful for treating or
CC preventing a disorder associated with decreased expression or activity of
CC hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.
CC The present sequence represents a 17-mer nucleotide, used in the
CC invention for scanning the sequence represented in ACN63102
XX
SQ Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 15; DB 1; Length 17;
QY Best Local Similarity 100.0%; Pred. No. 1.6e+03;
QY Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1507 CCCAGAGCTGCTGG 1521
QY |||||
QY 15 CCCAGAGCTGCTGG 1
DB
RESULT 2757
ACN64556/c
ID ACN64556 standard; DNA; 17 BP.
XX
AC ACN64556;
XX
DT 02-DEC-2004 (first entry)
XX
DE Human GDMLP-1 probe SEQ ID NO:1458.
XX

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KM Human; ss; probe; myosin-like protein-1; hGDMLP-1;
KM hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;
KM skeletal muscle function.
XX
OS Homo sapiens.
XX
PN US2004137589-A1.
XX
PD 15-JUL-2004.
XX
PF 26-NOV-2003; 2003US-00723361.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
PR 25-MAY-2001; 2001US-00866108.
XX
PA (GUYV/) GU Y.
PA (JIYV/) JI Y.
PA (PENN/) PENN S G.
PA (HANZ/) HANZEL D K.
PA (RANK/) RANK D.
PA (CHEN/) CHEN W.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;
XX WPI; 2004-533378/51.
XX
PT Novel myosin-like protein-1, useful for treating or preventing disorder
PT associated with decreased expression or activity of human genome-derived
PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle
PT function.
XX
PS Disclosure; SEQ ID NO 1458; Opp; English.
XX
CC The invention relates to a novel polypeptide (I) comprising a sequence
CC (S1) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully
CC defined in the specification, a fragment of at least 8 amino acids of
CC (S1), 95% deviation from (S1) which are conservative substitutions, and
CC 65% identity to (S1). A polypeptide of the invention acts as a agonist or
CC antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A
CC pharmaceutical composition of the invention is useful for treating or
CC preventing a disorder associated with decreased expression or activity of
CC hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.
CC The present sequence represents a 17-mer nucleotide, used in the
CC invention for scanning the sequence represented in ACN63102
XX
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 15; DB 1; Length 17;
QY Best Local Similarity 100.0%; Pred. No. 1.6e+03;
QY Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1507 CCCAGAGCTGCTGG 1521
QY |||||
QY 16 CCCAGAGCTGCTGG 2
DB
RESULT 2758
ACN64555/c

```

ID ACN64555 standard; DNA; 17 BP.  
 XX ACN64555;  
 AC  
 XX  
 DT 02-DEC-2004 (first entry)  
 XX  
 DE Human GDMPL-1 probe SEQ ID NO:1457.  
 XX  
 KW Human; ss; probe; myosin-like protein-1; hGDMPL-1;  
 KW hGDMPL-1 agonist hGDMPL antagonist; hGDMPL inhibitor; heart disorder;  
 KW skeletal muscle function.  
 XX  
 OS Homo sapiens.  
 XX US2004137589-A1.  
 PN  
 XX  
 PD 15-JUL-2004.  
 XX  
 PF 26-NOV-2003; 2003US-00723361.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 XX 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 PR 25-MAY-2001; 2001US-00866108.  
 XX  
 PA (GUY/) GU Y.  
 PA (UY/) U Y.  
 PA (PENN/) PENN S G.  
 PA (HANK/) HANZEL D K.  
 PA (RANK/) RANK D.  
 PA (CHEN/) CHEN W.  
 PA (SHAN/) SHANNON M E.  
 XX  
 PT Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;  
 DR WPI; 2004-533378/51.  
 XX  
 PT Novel myosin-like protein-1, useful for treating or preventing disorder  
 PT associated with decreased expression or activity of human genome-derived  
 PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle  
 PT function.  
 PT  
 PS Disclosure; SEQ ID NO 1457; Opp; English.  
 XX  
 CC The invention relates to a novel polypeptide (I) comprising a sequence  
 CC (S1) of myosin-like protein-1 (hGDMPL-1) having 2568 amino acids fully  
 CC defined in the specification, a fragment of at least 8 amino acids of  
 CC (S1), 95% deviation from (S1) which are conservative substitutions, and  
 CC 65% identity to (S1). A polypeptide of the invention acts as an agonist or  
 CC antagonist of hGDMPL-1, or as an inhibitor of hGDMPL-1 activity. A  
 CC pharmaceutical composition of the invention is useful for treating or  
 CC preventing a disorder associated with decreased expression or activity of  
 CC hGDMPL-1, such as a disorder of heart and/or skeletal muscle function.  
 CC The present sequence represents a 17-mer nucleotide, used in the  
 CC invention for scanning the sequence represented in ACN63102  
 CC  
 XX Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1507 CCCAGAGCTGCTGG 1521  
 DB 17 CCCAGAGCTGCTGG 3  
 RESULT 2759  
 AA231617/c  
 ID AA231617 standard; DNA; 18 BP.  
 XX  
 AC AA231617;  
 XX  
 DT 13-JAN-2000 (first entry)  
 XX  
 DE Human IKB-Beta antisense inhibitor ISIS# 23605.  
 XX  
 KW Inhibitor-kappa B kinase-beta; IKB-beta; human; T-cell leukaemia; asthma;  
 KW inflammatory response; inflammatory disease; juvenile diabetes mellitus;  
 KW Graves' disease; rheumatoid arthritis; allograft rejection; diagnosis;  
 KW inflammatory bowel disease; multiple sclerosis; contact dermatitis;  
 KW rhinitis; allergy; hyperproliferative disorder; tumour; therapy;  
 KW antisense inhibitor; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US5977341-A.  
 XX  
 PD 02-NOV-1999.  
 XX  
 PF 20-NOV-1998; 98US-00197008.  
 XX  
 PR 20-NOV-1998; 98US-00197008.  
 PR 20-NOV-1998; 98US-00197008.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PT Monia BP, Cowseert LM;  
 PT WPI; 1999-619715/53.  
 DR  
 XX  
 PT Antisense oligonucleotides inhibiting human inhibitor-kappa B Kinase-  
 PT beta; useful for treating conditions such as inflammation, asthma,  
 PT diabetes, allograft rejection, allergies, hyperproliferative disorders or  
 PT tumors.  
 PT  
 PS Claim 11; Col 40; 32pp; English.  
 XX  
 CC This sequence represents an antisense oligonucleotide (I) of the  
 CC invention. (I) are 8 to 30 nucleotides in length and inhibit the  
 CC expression of human inhibitor-kappa B kinase-beta (IKB-beta). (I)  
 CC inhibits the expression of human IKB-beta which plays a role in the  
 CC development of T-cell leukaemia and in the activation of inflammatory  
 CC responses. (I) is therefore useful for treating inflammatory diseases or  
 CC disorders with an inflammatory component such as asthma, juvenile  
 CC diabetes mellitus, Graves' disease, rheumatoid arthritis, allograft  
 CC rejection, inflammatory bowel disease, multiple sclerosis, contact  
 CC dermatitis, rhinitis and various allergies, or hyperproliferative  
 CC disorders such as leukaemias and other tumours. (I) may also be used for  
 CC detection of the above disorders  
 CC  
 XX Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 15; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 3511 GTTTGCAAGCAGAG 3525  
 DB 15 GTTTCAGCAGAG 1  
 RESULT 2760  
 ACD6665/c

ID	ACD66665 standard; DNA; 18 BP.
XX	
AC	ACD66665;
DT	16-SEP-2003 (first entry)
XX	
DE	Human Inhibitor-kappa B kinase-beta antisense oligonucleotide #34.
XX	
KW	Human; inhibitor-kappa B kinase-beta; anorectic; antidiabetic;
KW	antiinflammatory; cytostatic; gene therapy; antisense compound; obesity;
KW	diabetes type II; inflammatory disorder; cancer; leukaemia;
XX	antisense oligonucleotide; ss.
OS	Homo sapiens.
XX	
PN	US2003050270-A1.
XX	
PD	13-MAR-2003.
XX	
PF	24-MAY-2002; 2002US-00156610.
XX	
PR	20-NOV-1998; 98US-00197008.
PR	28-JUL-1999; 99WO-US016959.
PR	30-AUG-2001; 2001US-00856246.
PA	(MONI/) MONIA B P.
PA	(COMS/) COMSERT L M.
PA	(KOLL/) KOLLER E.
XX	
PI	Monia BP, Cowsert LM, Koller E;
DR	WPI; 2003-512357/48.
XX	
PT	New antisense compound, useful for preparing a composition for treating
PT	obesity, diabetes type II, inflammatory disorder or cancer e.g.,
PT	leukemia.
XX	
XX	Claim 3; Page 22; 49pp; English.
XX	
CC	The invention describes a new antisense compound, which is 8-30
CC	nucleobases in length targeted to a nucleic acid molecule encoding
CC	inhibitor-kappa B Kinase-beta that specifically hybridises with and
CC	inhibits the expression of Inhibitor-kappa B Kinase-beta. The compound is
CC	useful for preparing a composition for treating obesity, diabetes type
CC	II, inflammatory disorder or cancer e.g., leukemia. This sequence
CC	represents an antisense oligonucleotide used to inhibit the expression
CC	of inhibitor-kappa B kinase-beta
XX	
SQ	Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
XX	
Query Match	0.1%; Score 15; DB 1; Length 18;
Best Local Similarity	100.0%; Pred. No. 1.7e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	3511 GTTTCACAAGCAGAAG 3525
DB	15 GTTTCACAAGCAGAAG 1
XX	
RESULT 2761	
ADFI3012/c	
ID	ADFI3012 standard; DNA; 18 BP.
XX	
AC	ADFI3012;
XX	
DT	12-FEB-2004 (first entry)
DE	Human PCMI exon 19 splice donor fragment.
XX	
XX	schizophrenia; chromosome 8p21-22; pericentriolar material 1; PCMI;
KW	Marker; microsatellite repeat; NT 000501 contig; polymorphic marker;
linkage disequilibrium; DBS261; DBS2615; DBS2616;	
single nucleotide polymorphism; SNP; ds.	

XX	Homo sapiens.
OS	WO2003050301-A2.
PN	19-JUN-2003.
PD	12-DEC-2002; 2002WO-GB005630.
PF	12-DEC-2001; 2001GB-00029758.
PR	(GURL/) GURLING H M D.
PA	Gurling HMD;
P1	WPI; 2003-532919/50.
DR	Determining the susceptibility of an individual to a neuropsychiatric disorder (e.g. schizophrenia) or diagnosing or prognosing the disorder comprises using a pericentriolar material 1 marker in the Chromosomal region 8p21-22.
PT	Claim 9; Fig 6; 108pp; English.
PS	This invention describes a novel method of determining the susceptibility to or diagnosis of schizophrenia comprising using a marker located in the chromosomal region 8p21-22. The method involves determining the presence or absence in a test sample of a pericentriolar material 1 (PCMI) marker which is selected from any of the microsatellite repeats present in the NT 000501 contig on chromosome 8p21-22 or a polymorphic marker which is in linkage disequilibrium with the chromosome. The PCMI marker is preferably DBS261, DBS2615 or DBS2616 and lies within the PCMI gene. The novel method involves assessing two or more of the PCMI markers single nucleotide polymorphisms (SNPs). The PCMI gene is amplified, particularly within the intronic sequence 3' to exon 4, in exon 4, or in the intronic sequence 5' of exon 5. The PCMI marker is assessed by strand conformation polymorphic marker analysis, heteroduplex analysis or restriction fragment length polymorphism (RFLP) analysis. Schizophrenia therapy comprises screening an individual for a genetic predisposition to schizophrenia, where the predisposition is correlated with the PCMI marker and if a predisposition is identified, providing therapeutic treatment for the individual. Alternatively, the method comprises administering to a patient a substance that modulates the expression from the PCMI gene or a gene located within 1000 base of the PCMI locus. This sequence represents the human PCMI exon 19 splice donor region.
CC	Sequence 18 BP; 4 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
SQ	Query Match            0.1%; Score 15; DB 1; Length 18; Best Local Similarity   100.0%; Pred. No. 1.7e+03; Matches   15; Conservative   0; Mismatches   0; Indels   0; Gaps   0;
OY	1359 GTCACTTAAGTGGTG 1373       Db      18 GTCACCTAAGCGGTG 4
RESULT 2762	
ADE29788	AD29788 standard; RNA, 19 BP.
AC	ADE29788;
DT	29-JAN-2004 (first entry)
DE	Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:410.
KX	short interfering nucleic acid; siNA; downregulation; inhibition; KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; KW cytosolic; anorectic; anti-diabetic; anti-inflammatory; antidiabetic; KW immunosuppressive; antibacterial; antineumatic; antiarthritic; KW immunoradiatic; gastroenterical; obesity; diabetic; tumour; KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;

```

KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; 88.
XX Synthetic.
OS
XX WO2003072590-A1.
XX
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcwiggan J, Beigelman L, Usman N, Haeblerli P, Chowrira B;
XX WPI; 2003-689980/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX
XX Example 3; SEQ ID NO 410; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a mitogen-activated protein kinase
XX (MAPK) genes by RNA interference. Also described: (1) a method for
XX modulating expression of MAPK genes in cells, tissue explants or
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX vectors that express siNA and cells containing these vectors. MAPK siNAs
XX have cytostatic, anorectic, antidiabetic, antibacterial, antiinflammatory,
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX antidiarrhetic, antiparasitic and gastrointestinal activities. The MAPK
XX siNAs can be used to modulate the expression of MAPK genes, in cells,
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX and II; a wide range of tumours, and inflammatory diseases (asthma,
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX disease). They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents a MAPK siNA which is used
XX in the exemplification of the present invention.
XX
XX Sequence 19 BP; 0 A; 9 C; 6 G; 0 T; 4 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 19;
XX Best Local Similarity 73.3%; Pred. No. 1.8e+03;
XX Matches 11; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX
XX 175 CGCTGCTGCTGCTGC 189
XX |||:|:|:|:|:|:|
XX Db 2 CGCTGCTGCTGCTGC 16
XX
XX RESULT 2763
XX ADE29893/c
XX ID ADE29893 standard; RNA, 19 BP.
XX
XX ADE29893;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:515.
XX
XX short interfering nucleic acid; siNA; downregulation; inhibition;

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KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
KW cytosstatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
KW immunosuppressive; antibacterial; antirheumatic; antidiarrhetic;
KW antiparasitic; gastrointestinal; obesity; diabetes; tumour;
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
KW psoriasis; inflammatory bowel disease; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; 88.
XX Synthetic.
OS
XX WO2003072590-A1.
XX
XX 04-SEP-2003.
XX
XX 28-JAN-2003; 2003WO-US002510.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcwiggan J, Beigelman L, Usman N, Haeblerli P, Chowrira B;
XX WPI; 2003-689980/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of mitogen-activated
XX protein kinase genes.
XX
XX Example 3; SEQ ID NO 515; 164pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
XX that downregulates expression of a mitogen-activated protein kinase
XX (MAPK) genes by RNA interference. Also described: (1) a method for
XX modulating expression of MAPK genes in cells, tissue explants or
XX organisms by introduction of siNA; (2) kits for in vitro or in vivo
XX delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
XX vectors that express siNA and cells containing these vectors. MAPK siNAs
XX have cytostatic, anorectic, antidiabetic, antibacterial, antiinflammatory,
XX antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
XX antidiarrhetic, antiparasitic and gastrointestinal activities. The MAPK
XX siNAs can be used to modulate the expression of MAPK genes, in cells,
XX tissue explants or organisms, e.g. for treating obesity; diabetes types I
XX and II; a wide range of tumours, and inflammatory diseases (asthma,
XX septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
XX disease). They can also be used for drug screening; diagnosis; target
XX identification and validation; genetic engineering; pharmacogenomics;
XX studying gene function and gene mapping (e.g. of single-nucleotide
XX polymorphisms). The present sequence represents a MAPK siNA which is used
XX in the exemplification of the present invention.
XX
XX Sequence 19 BP; 4 A; 6 C; 9 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 175 CGCTGCTGCTGCTGC 189
XX |||:|:|:|:|:|:|
XX Db 18 CGCTGCTGCTGCTGC 4
XX
XX RESULT 2764
XX ADF53675/c
XX ID ADF53675 standard; DNA, 19 BP.
XX
XX ADF53675;
XX

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DT 12-FEB-2004 (first entry)
XX
DE Phosphatase related PCR primer, SEQ ID NO 43.
XX
KM phosphatase; mutated; computer readable recording medium; solid support;
XX PCR; primer; ss.
XX
OS Unidentified.
XX
PN WO2003091428-A1.
XX
PD 06-NOV-2003.
XX
PF 23-APR-2003; 2003WO-JP005175.
XX
PR 23-APR-2002; 2002JP-00120709.
PR 04-DEC-2002; 2002JP-0052308.
XX
PA (RIKE ) RIKEN KK.
PA (DNAF-) DNAFORM KK.
PA (MITU ) MITSUBISHI CHEM CORP.
XX
PI Hayashizaki Y, Kamiya M, Kubodera H;
XX
DR WPI; 2003-854398/79.
XX
PT Proteins with phosphatase activity useful for screening for substances
XX that affect their activity.
XX
PS Example 7; SEQ ID NO 43; 170pp; Japanese.
XX
CC The invention relates to novel isolated proteins comprising an amino acid
CC sequence represented by any of SEQ ID NOS: 8 to 14, 25 and 26; and a
CC protein comprising an amino acid sequence derived from an amino acid
CC sequence represented by any of SEQ ID NOS: 8 to 14, 25 and 26 by
CC deletion, substitution and/or addition of one to several amino acids and
CC having a phosphatase activity. The invention further comprises: the DNA
CC of optionally mutated sequences SEQ ID NOS: 1-7, 23 and 24 or those that
CC hybridise to them; DNA and cDNA encoding the proteins; vectors containing
CC the DNA; cells containing the vectors; proteins produced by the cells;
CC whole or fragments of antibodies against the proteins; screening for
CC substances that affect the expression and activity of the proteins; a
CC computer readable recording medium; and a solid support bound to the DNA.
CC The novel phosphatase proteins are useful for screening for substances
CC that affect the activity of the proteins, which have potential use in the
CC development of drugs for treating associated disorders. This
CC polynucleotide represents a PCR primer used in the exemplification of the
CC invention.
XX
SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 15; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.8e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4455 CTTGGAACACCA 4469
DB 19 CTTGGAACACCA 5
XX
RESULT 2765
AAQ22692
ID AAQ22692 standard; DNA; 20 BP.
XX
AC AAQ22692;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 24-JUL-1992 (first entry)
XX
DE Sequence of probewhich hybridises to a peptide named peak 2 of acylamino
DE acid racemase.
XX

```

```

KM Enzyme; optically active amino acid; ss.
XX
OS Amycolatopsis sp; TS-1-60.
XX
PN EP474965-A.
XX
PD 18-MAR-1992.
XX
PF 04-MAY-1991; 91EP-00107248.
XX
PR 14-SEP-1990; 90JP-00245257.
XX
PA (TAKE ) TAKEDA CHEM IND LTD.
XX
PI Tokuyama M, Hatano K, Nakahama K, Takahashi T;
XX
DR WPI; 1992-089740/12.
XX
PT DNA encoding acylamino acid racemase - allows high efficiency industrial
PT prodn. of enzyme.
XX
PS Example; Page 8; 22pp; English.
XX
CC The inventors claim the gene for acylamino acid racemase, esp. bases 62-
CC 1189 or 1-1400. Acylamino acid racemase is a useful enzyme in the prodn.
CC of optically active amino acids. (Updated on 25-MAR-2003 to correct PA
CC field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 2e+03;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 583 ACATCCTGAACATCAAG 599
DB 2 AGATCCTGAACATCAAG 18
XX
RESULT 2766
AAZ03918
ID AAZ03918 standard; DNA; 20 BP.
XX
AC AAZ03918;
XX
DT 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KM Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KM paratrachoma; inclusion conjunctivitis; genital disease; peritriptitis;
KM nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KM Bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
PN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
PA (GENST ) GENSET.
XX
PI Grifffais R;
XX
DR WPI; 1999-371125/31.
XX

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PT Genome sequence of Chlamydia trachomatis.
XX
XX PS Disclosure; Page 1646; 1755pp; English.
XX
XX PCR primers AA201426-206209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
CC encode polypeptides (see AA136754-Y31949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conjunctival trachoma, nongonococcal urethritis,
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis,
CC pneumopathy in breast feeding infants, and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
XX
XX SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3564 CTGCTTCCTCAATG 3578
Db 5 CTGCTTCCTCAATG 19

RESULT 2767
AA94235
ID AA94235 standard; DNA; 20 BP.
XX
XX AC AA94235;
XX
XX DT 13-SEP-1999 (first entry)
XX
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoïdosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX OS Synthetic.
XX OS Chlamydia pneumoniae.
XX
XX FN MO9927105-A2.
XX
XX PD 03-JUN-1999.
XX
XX PF 20-NOV-1998; 98WO-IB001890.
XX
XX PR 21-NOV-1997; 97FR-00014673.
XX PR 04-NOV-1998; 98US-0107078P.
XX
XX PA (BEST ) GENSET.
XX
XX PI Griffiths R;
XX
XX DR WPI; 1999-357842/30.
XX
XX PT Genome sequence of Chlamydia pneumoniae.
XX
XX PS Page 1654; Disclosure; 1912pp; English.
XX
XX AA91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AA91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AA934584- AA935879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,

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CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
XX SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1011 AACAGCCGCTCTT 1025
Db 5 AACAGCCGCTCTT 19

RESULT 2768
ABX16386
ID ABX16386 standard; DNA; 20 BP.
XX
XX AC ABX16386;
XX
XX DT 09-APR-2003 (first entry)
XX
XX DE High growth region associated polynucleotide #7.
XX
XX KW High growth region; high growth phenotype; Soccs2; body size;
XX suppressor of cytokine signaling 2; ds.
XX
XX OS Unidentified.
XX
XX PN US2002155564-A1.
XX
XX PD 24-OCT-2002.
XX
XX PF 26-JAN-2001; 2001US-00771208.
XX
XX PR 29-DEC-1997; 97US-00999477.
XX
XX PA (REGC ) UNIV CALIFORNIA.
XX
XX PI Medrano JF, Bradford E, Horvat S;
XX
XX DR WPI; 2003-182637/18.
XX
XX PT Novel gene that when downregulated or knocked-out, results in high growth
XX phenotype, useful for regulating body size in mammals e.g. rodent, bovine
XX and canine.
XX
XX PS Disclosure; SEQ ID NO 16; 49pp; English.
XX
XX CC The invention describes an isolated nucleic acid molecule encoding a gene
XX product that, when knocked out, results in a high growth (hg) phenotype.
XX CC For example a nucleic acid disrupting the Soccs2 gene is useful for
XX CC producing an animal characterised by a hg phenotype, by inhibiting
XX CC expression of Soccs2 (suppressor of cytokine signaling 2) gene. The nucleic
XX CC acids of the invention are useful for regulating body size in mammals.
XX CC gene. The nucleic acids of the invention are useful for regulating body
XX CC size in mammals. This sequence represents a high growth region associated
XX CC polynucleotide that appears in the electronic sequence listing but is not
XX CC described in the specification. Note: This sequence did not form part of
XX CC the printed specification but was obtained in electronic format directly
XX CC from the US patent office at
XX CC seqdata.uspto.gov/sequence.html?DocID=20020155564
XX
XX SQ Sequence 20 BP; 6 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2463 ATCTTGAGAGAGAG 2477
Db 5 ATCTTGAGAGAGAG 19

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RESULT 2769
ADAF13469/c
ID ADAF13469 standard; DNA; 20 BP.
XX
AC ADAF13469;
XX
DT 20-NOV-2003 (first entry)
XX
DE Mouse RRP1 related PCR primer SEQ ID NO:56.
XX
KM tumour; growth inhibition; rhomboid related protein; RRP; p53; p21;
XX cyostatic; gene therapy; mouse; PCR primer; ss.
XX
OS Synthetic.
XX Mus musculus.
XX
PN WO2003070771-A1.
XX
PD 28-AUG-2003.
XX
PF 22-JAN-2003; 2003WO-US001858.
XX
PR 23-JAN-2002; 2002US-00056790.
XX
PA (EXEL-) EXELIXIS INC.
XX
PI Francis-lang H, Friedman L, Belvin M, Plowman GD, Larson JS;
PI Chen C, Roberston SA, Llobin MN, Shi W, Chan J, Funke RP, Li D;
PI Kauselmann G, Tintrop H, Zevnik B, Schoor M, Reardon BJ;
XX WPI; 2003-663850/62.
XX
PT Specifically inhibiting the growth of tumor cells that overexpress a
PT Rhomboid Related Protein (RRP) comprises contacting the tumor cells with
PT an amount of an exogenous RRP binding agent (e.g. an antibody) to inhibit
PT tumor growth.
XX
PS Example; Page 139; 146pp; English.
XX
CC The present invention describes a method of specifically inhibiting
CC growth of tumor cells that over-express a rhomboid related protein (RRP)
CC comprising contacting the tumor cells with an amount of an exogenous RRP
CC binding agent that results in the inhibition of growth of tumor cells.
CC Also described: (1) screening for agents that modulate the interaction of
CC an RRP polypeptide with an RRP binding target; (2) diagnosing a tumour
CC cell as having abnormal p53 or p21 pathway signaling; (3) identifying a
CC candidate p53 or p21 pathway modulating agent; (4) modulating a p53 or
CC p21 pathway of a cell; (5) diagnosing a disease in a patient; (6) a
CC purified nucleic acid molecule that encodes a RRP polypeptide, or its
CC reverse complement; (7) a recombinant expression system comprising a DNA
CC or RNA molecule, where the expression system is capable of producing an
CC mRNP1 polypeptide when the expression system is present in a compatible
CC host cell; (8) producing an mRNP1 protein; (9) producing a cell which
CC produces an mRNP1 protein; (10) a recombinant host cell comprising the
CC expression system of (7) or expressing the protein produced by method (8)
CC ; (11) a transgenic mouse whose genome comprises a disruption in an
CC endogenous RRP gene, where the disruption results in decreased expression
CC or a lack of expression of the endogenous RRP gene; (12) a cell isolated
CC from the transgenic mouse or whose genome comprises a disruption in an
CC endogenous RRP gene, where the disruption results in decreased expression
CC or a lack of expression of the endogenous RRP gene; (13) selecting an
CC agent that modulates cell proliferation; and (14) making an antibody
CC against a human RRP. RRP sequences have cyostatic activity, and can be
CC used in gene therapy. The method of the invention is useful in diagnosing
CC or specifically inhibiting the growth of tumor cells that over-express
CC an RRP protein. The RRP nucleic acid and polypeptide sequences can be
CC used for identifying and testing agents that modulate RRP function and
CC for other applications related to the involvement of RRP in the p53 or
CC p21 pathways. The present invention represents a PCR primer for mouse
CC RRP1, which is used in an example from the present invention.
XX
Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

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Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1356 GTGTCACCTACTGTG 1370
DB 20 GTGTCACCTACTGTG 6

RESULT 2770
ADAF13633/c
ID ADAF13633 standard; DNA; 20 BP.
XX
AC ADAF13633;
XX
DT 04-DEC-2003 (first entry)
XX
DE Enterohaemorrhagic E. coli O157:H7-specific nucleic acid SEQ ID NO: 1864.
XX
KM de; gene; enterohaemorrhagic; anti-bacterial.
XX
OS Escherichia coli; O157:H7.
XX
PN JP2002355074-A.
XX
PD 10-DEC-2002.
XX
PF 24-JAN-2002; 2002JP-00015959.
XX
PR 24-JAN-2001; 2001JP-00112010.
XX
PA (UYTS-) UNIV TSUKUBA.
XX
DT WPI; 2003-451640/43.
XX
PT Enterohaemorrhagic Escherichia coli O157:H7-specific nucleic acid molecule
PT and a polypeptide and its use, a polypeptide, a vector and a host cell.
XX
PS Claim 2; SEQ ID NO 1864; 2067pp; Japanese.
XX
CC The invention relates to a novel enterohaemorrhagic Escherichia coli
CC O157:H7-specific nucleic acid molecule. A polynucleotide of the invention
CC has anti-bacterial activity. The polypeptide can be used in detection
CC and/or treatment of O157:H7 infection. The nucleotide sequence of the
CC genome of Enterohaemorrhagic E. coli O157:H7 was determined. The present
CC sequence represents an E. coli O157:H7-specific nucleic acid of the
XX invention.
XX
SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3251 TGGGAAGCAGACTGA 3265
DB 18 TGGGAAGCAGACTGA 4

RESULT 2771
ADAF13633/c
ID ADAF13633 standard; DNA; 20 BP.
XX
AC ADAF13633;
XX
DT 12-FEB-2004 (first entry)
XX
DE Osteonidogen, BaysNP 10811, PCR primer #1.
XX
KM Cardiant; antiarteriosclerotic; vasotropic; cerebroprotective;
XX hypotensive; gene therapy; human; osteonidogen; PCR; primer; ss.
XX

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OS Homo sapiens.
XX WO2003072813-A2.
XX
XX 04-SEP-2003.
XX
XX 14-FEB-2003; 2003WO-EP001514.
XX
XX 27-FEB-2002; 2002EP-00004258.
XX
XX (FARB ) BAYER AG.
XX
XX Stropp U, Schwerts S, Kallabis H;
XX
XX WPI; 2003-712738/67.
XX
XX New isolated polynucleotide encoded by a phenotype-associated gene,
XX useful for prognosticating statin therapy response, and diagnosing or
XX treating cardiovascular diseases, such as hypertension, myocardial
XX infarction and stroke.
XX
XX Example 1; Page 74; 182pp; English.
XX
XX The present invention relates to human phenotype-associated (PA) genes (I
XX ; ADF1307-ADF13386) which contain a Single Nucleotide Polymorphism
XX (SNP). The SNP is given in the sequence as a variant nucleotide. Also
XX claimed are methods for screening for agents which regulate the activity
XX of a PA gene and reagents that modulate the activity of a PA polypeptide
XX or a polynucleotide where the reagent is identified by the screening
XX method. The methods and compositions of the present invention are useful
XX for prognosticating, diagnosing and treating cardiovascular diseases,
XX such as atherosclerosis, hypertension, stenosis, arterial inflammation,
XX myocardial infarction and stroke. The present sequence is a PCR primer,
XX used in the examples from the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3130 TAGAGCTGGAAGCTGA 3144
XX |||||
XX 16 TAGAGCTGGAAGCTGA 2
XX
XX Db
XX
XX RESULT 2772
XX ADF47154/c
XX ID ADF47154 standard; DNA; 20 BP.
XX
XX AC ADF47154;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX Mouse PCR probe 152 used in the generation of targeted ES cells.
XX
XX DE RRP; rhomboid related protein; p53; p21; therapy; tumour; breast; ovary;
XX lung; kidney; colon; mouse; PCR; probe; ss.
XX
XX OS Mus sp.
XX
XX PN US2003165497-A1.
XX
XX PD 04-SEP-2003.
XX
XX 23-JAN-2002; 2002US-00056790.
XX
XX 19-JUL-2000; 2000US-0219289P.
XX
XX 21-MAR-2001; 2001US-0277471P.
XX
XX 21-MAR-2001; 2001US-0277487P.
XX
XX 05-JUL-2001; 2001US-0296076P.
XX
XX 12-JUL-2001; 2001US-0304863P.
XX
XX 12-JUL-2001; 2001US-0305017P.
XX

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PR 18-JUL-2001; 2001US-00908419.
PR 10-OCT-2001; 2001US-0328491P.
PR 10-OCT-2001; 2001US-0328605P.
XX
XX (LIOU/) LIOUBIN M. N.
XX
XX (FRIE/) FRIEDMAN L.
XX
XX (BELV/) BELVIN M.
XX
XX (LARS/) LARSON J. S.
XX
XX (CHEN/) CHEN C.
XX
XX (ROBE/) ROBERTSON S. A.
XX
XX (SHIW/) SHI W.
XX
XX (CHAN/) CHAN J.
XX
XX (LIID/) LI D.
XX
XX (FRAN/) FRANCIS-LANG H.
XX
XX (PLOW/) PLOWMAN G. D.
XX
XX (FUNK/) FUNK R. P.
XX
XX (SCHU/) SCHOOOR M.
XX
XX (ZEVI/) ZEVIK B.
XX
XX (KAUS/) KAUSELMANN G.
XX
XX (TINT/) TINTROP H.
XX
XX Lioubin MN, Friedman L, Belvin M, Larson JS, Chen C;
XX Robertson SA, Shi W, Chan J, Li D, Francis-Lang H, Plowman GD;
XX Funke RP, Schoor M, Zevnik B, Kauselmann G, Tintrop H;
XX WPI; 2003-898032/82.
XX
XX Inhibition of growth of tumor cells overexpressing rhomboid related
XX protein, RRP, useful therapeutically to inhibit growth of e.g. breast
XX tumor cells by contacting with exogenous agent binding a RRP.
XX
XX Example; SEQ ID NO 56; 84pp; English.
XX
XX The present invention relates to growth of tumour cells overexpressing a
XX rhomboid related protein (RRP) which can be inhibited by contacting an
XX exogenous agent binding RRP, since RRP genes are modulators of the p53 or
XX p21 pathway. The invention is useful therapeutically to inhibit growth of
XX tumour cells overexpressing RRP especially from breast, ovary, lung,
XX kidney or colon. The invention is useful to identify agents which can
XX modulate and restore p53 or p21 and/or RRP activity. The present sequence
XX is mouse PCR probe used in the generation of targeted embryonic stem
XX (ES) cells.
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1356 GTGTGACCTACCTG 1370
XX |||||
XX 20 GTGTGACCTACCTG 6
XX
XX Db
XX
XX RESULT 2773
XX ABZ98754/c
XX ID ABZ98754 standard; DNA; 20 BP.
XX
XX AC ABZ98754;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX Human tryptase b oligonucleotide sequence.
XX
XX DE Human; antisease; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquitinone; antiinflammatory; anti allergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX

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PN WO200285308-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX  
PS Disclosure; SEQ ID NO 13996; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 183 CTGCTGCTGCTGCG 197  
Db 17 CTGCTGCTGCTGCG 3  
RESULT 2774  
ABZ97289/c  
ID ABZ97289 standard; DNA; 20 BP.  
XX  
AC ABZ97289;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human nucleic acid sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX

PN WO200285308-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013135.  
XX  
XX 24-APR-2001; 2001US-0286137P.  
XX  
XX (EPIC-) EPIGENESIS PHARM INC.  
XX  
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;  
PI Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-229219/22.  
XX  
PT Pharmaceutical composition for treating ailments associated with impaired  
PT respiration, has oligo(s) antisense to specific gene(s) or its  
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
PT ubiquinone.  
XX  
XX  
PS Disclosure; SEQ ID NO 12531; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
CC first active agent comprising an oligonucleotide antisense to the  
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
CC junctions of genes encoding a polypeptide associated with lung and/or  
CC nasal airway dysfunction and a second active agent comprising an  
CC antiinflammatory steroid and ubiquinone. A composition of the invention  
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
CC immunosuppressive, and cytostatic activity. The composition may have a  
CC use in antisense gene therapy. The composition is useful for treating or  
CC preventing a respiratory, lung or malignant disease or condition, also  
CC for enhancing the prophylactic or therapeutic respiratory effect of an  
CC antiinflammatory steroid in a subject, for reducing or depleting levels  
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
CC lung inflammation, lung allergies, or a respiratory disease or condition.  
CC Note: The sequence data for this patent is not represented in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 15; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2e+03;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 183 CTGCTGCTGCTGCG 197  
Db 17 CTGCTGCTGCTGCG 3  
RESULT 2775  
ABZ98589/c  
ID ABZ98589 standard; DNA; 20 BP.  
XX  
AC ABZ98589;  
XX  
DT 17-OCT-2003 (first entry)  
XX  
DE Human tryptase a oligonucleotide sequence.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX  
XX Homo sapiens.  
XX  
XX

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PN WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
XX Miller S, Tang L, Shanabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 13831; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 183 CTGCTGCTGCTGCGG 197
XX |||||||||
XX 17 CTGCTGCTGCTGCGG 3
XX
XX
XX RESULT 2776
XX ADM93007/C
XX ID ADM93007 standard; DNA; 20 BP.
XX
XX ADM93007;
XX
XX 03-JUN-2004 (first entry)
XX
XX SNF-containing cardiovascular associated gene primer #318.
XX
XX SNF; single nucleotide polymorphism; cardiovascular associated gene;
XX allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
XX restenosis; arterial inflammation; myocardial infarction; stroke; primer;
XX ss.
XX
XX Homo sapiens.
XX
XX WO2003057911-A2.
XX

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PD 17-JUL-2003.
XX
XX 07-JAN-2003; 2003WO-EP000060.
XX
XX 08-JAN-2002; 2002EP-00000153.
XX
XX (FARB ) BAYER AG.
XX
XX Stropp U, Schwens S, Kallabis H;
XX WPI; 2003-577532/54.
XX
XX New isolated polynucleotides comprising single nucleotide polymorphisms
XX of the cardiovascular gene, useful for assessing predisposition or
XX susceptibility to a cardiovascular disease, e.g. atherosclerosis,
XX restenosis or stroke.
XX
XX Disclosure; Page 81; 187pp; English.
XX
XX The invention relates an isolated polynucleotide (I) encoded by a
XX cardiovascular associated (CA) gene, having allelic variation contained
XX in a functional surrounding like full length cDNA for CA gene
XX polypeptide, and with or without the CA gene promoter sequence. (I) is a
XX polynucleotide comprising single nucleotide polymorphisms predicting
XX cardiovascular disease. The polynucleotides are useful for assessing
XX predisposition or susceptibility to a cardiovascular disease, e.g.
XX atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
XX inflammation, myocardial infarction, and stroke. These may also be used
XX to predict personal medication schemes omitting adverse drug reactions,
XX or as probes for detecting genetic polymorphisms and as templates for the
XX recombinant production of normal or variant peptides/polypeptides encoded
XX by the genes. This sequence corresponds to a PCR primer to amplify one of
XX the genes of the invention.
XX
XX Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 3130 TAGAGCTGGAACCTGA 3144
XX |||||||||
XX 16 TAGAGCTGGAACCTGA 2
XX
XX
XX RESULT 2777
XX ABD31785/C
XX ID ABD31785 standard; DNA; 20 BP.
XX
XX ABD31785;
XX
XX 29-JUL-2004 (first entry)
XX
XX Human Tryptase b-derived oligonucleotide SEQ ID 13996.
XX
XX Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX

```



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AC ADJ60635;
XX
XX 06-MAY-2004 (first entry)
XX
XX Oligonucleotide associated to Tryptase-b #4.
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX WO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JM, Tang L, Sandrasagra A, Aguilar D, Miller S,
XX Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 1491; 85bp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX oligonucleotide and optionally surfactant operatively linked to the
XX oligonucleotide. The method is useful for preventing or treating a
XX respiratory or lung disease, which involves administering to the airways
XX of a subject an effective amount of an inhibitor. The oligonucleotide is
XX useful for production of a medicament for the prevention and/or treatment
XX of a respiratory or lung disease. The respiratory or lung disease is
XX chosen from airway inflammation, allergy(ies), asthma, impeded
XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX obstruction. The present sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 183 CTGCTGCTGCTGCGC 197
XX |||||
XX 17 CTGCTGCTGCTGCGC 3
XX
XX RESULT 2780
XX ADJ61705/c
XX ID ADJ61705 standard; DNA; 20 BP.
XX
XX AC ADJ61705;
XX
XX XX 06-MAY-2004 (first entry)
XX
XX DE Tryptase receptor #1.

```

```

XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Synthetic.
XX
XX WO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JM, Tang L, Sandrasagra A, Aguilar D, Miller S,
XX Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-203534/19.
XX
XX Example 7; SEQ ID NO 2561; 85bp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX oligonucleotide and optionally surfactant operatively linked to the
XX oligonucleotide. The method is useful for preventing or treating a
XX respiratory or lung disease, which involves administering to the airways
XX of a subject an effective amount of an inhibitor. The oligonucleotide is
XX useful for production of a medicament for the prevention and/or treatment
XX of a respiratory or lung disease. The respiratory or lung disease is
XX chosen from airway inflammation, allergy(ies), asthma, impeded
XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX obstruction. The present sequence represents a receptor of the invention.
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 183 CTGCTGCTGCTGCGC 197
XX |||||
XX 17 CTGCTGCTGCTGCGC 3
XX
XX RESULT 2781
XX ADJ60468/c
XX ID ADJ60468 standard; DNA; 20 BP.
XX
XX AC ADJ60468;
XX
XX XX 06-MAY-2004 (first entry)
XX
XX DE Oligonucleotide associated to Tryptase-a #4.
XX
XX XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.

```

```
XX OS Homo sapiens.
XX PN MO2004011613-A2.
XX PD 05-FEB-2004.
XX PF 25-JUL-2003; 2003WO-US023509.
XX PR 29-JUL-2002; 2002US-039076P.
XX PA (EPIC-) EPIGENESIS PHARM INC.
XX PI Myce JW, Tang L, Sandrasaga A, Aguilar D, Miller S,
XX PI Shahbuddin S, Lu H, Cong H;
XX DR WPI; 2004-203534/19.
XX PT Novel single or multiple target oligonucleotide anti-sense to e.g.
XX PT Initiation codons and introns of respiratory disease-relevant genes e.g.,
XX PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX PT disease e.g., asthma.
XX PS Claim 2; SEQ ID NO 1324; 85pp; English.
XX CC The present invention relates to an oligonucleotide anti-sense to e.g.,
XX CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX CC end of nucleic acid target comprising gene(s) chosen from e.g.
XX CC Interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX CC oligonucleotide and optionally surfactant operatively linked to the
XX CC oligonucleotide. The method is useful for preventing or treating a
XX CC respiratory or lung disease, which involves administering to the always
XX CC of a subject an effective amount of an inhibitor. The oligonucleotide is
XX CC useful for production of a medicament for the prevention and/or treatment
XX CC of a respiratory or lung disease. The respiratory or lung disease is
XX CC chosen from asthma, chronic obstructive pulmonary diseases
XX CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX CC obstruction. The present sequence represents an oligonucleotide of the
XX CC invention.
XX SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 15; DB 1; Length 20;
DB Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
183 CTGCTGCTGCTGCG 197
17 CTGCTGCTGCTGCG 3
RESULT 2782
ADJ16318 standard; DNA; 20 BP.
AC ADJ16318;
XX 20-MAY-2004 (first entry)
XX DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 868.
XX KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
XX KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX KW gall stone; triglyceridaemia; obesity; hepatitis;
XX KW hepatocellular carcinoma; aromatase; cytosolic; antipneumatic;
XX KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX KW antiinflammatory; virucidal.
XX OS Homo sapiens.
XX OS Synthetic.
```

```
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /label= OTHER= phosphorothioate backbone
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX FT cytidine nucleobases are 5-methylcytidine."
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX FT cytidine nucleobases are 5-methylcytidine."
XX PN WO2004003201-A2.
XX PD 08-JAN-2004.
XX PF 01-JUL-2003; 2003WO-US020865.
XX PR 01-JUL-2002; 2002US-0392813P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Kane CD;
XX PI WPI; 2004-083058/08.
XX DR WPI; 2004-083058/08.
XX XX New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX PT related homologue-1 (LRH1), useful for treating breast cancer.
XX PT dyslipidaemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX PS Example 15; SEQ ID NO 868; 909pp; English.
XX CC This invention relates to novel antisense compounds useful for modulating
XX CC the expression of liver related homologue-1 (LRH1) and splice variants
XX CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX CC length that target a portion of an active site on the nucleic acid
XX CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX CC nuclear receptor protein that functions as a tissue specific
XX CC transcription factor. The present invention describes antisense
XX CC oligonucleotides that comprise at least one modified internucleoside
XX CC linkage, a phosphorothioate linkage, at least one modified sugar moiety,
XX CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX CC methylcytidine. These antisense compounds are useful for treating or
XX CC diagnosing a disease associated with LRH1, such as breast cancer,
XX CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
XX CC LDL (low density lipoprotein), hypercholesterolemia, gall stone,
XX CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX CC hepatitis, as well as hepatocellular carcinoma or a condition associated
XX CC with aromatase activity. Accordingly, these compositions exhibit
XX CC cytosolic, antipneumatic, antiarteriosclerotic, anorectic, hepatotropic,
XX CC litholytic, antiinflammatory and virucidal activities. This
XX CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
XX CC expression of the human LRH1 protein of the invention.
XX SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
QY Query Match 0.1%; Score 15; DB 1; Length 20;
DB Best Local Similarity 100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
3026 CAAGCAAGTCTTCC 3040
2 CAAGCAAGTCTTCC 16
RESULT 2783
ADJ16728 standard; DNA; 20 BP.
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XX AC ADJ16728;
XX DT 20-MAY-2004 (first entry)
XX DE Antisense DNA oligo used to modulate human LRH1 expression Segid 1278.
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX gall stones; triglyceridaemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cycostatic; antilipaeamic;
XX antarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX OS Homo sapiens.
XX Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX PN WO2004003201-A2.
XX PD 08-JAN-2004.
XX XX 01-JUL-2003; 2003WO-US020865.
XX PR 01-JUL-2002; 2002US-0392813P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Kane CD;
XX WI; 2004-083058/08.
XX DR New antisense oligonucleotides targeted to a nucleic acid encoding liver
XX related homologue-1 (LRH1), useful for treating breast cancer,
XX dyslipidaemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX PT Example 15; SEQ ID NO 1278; 909pp; English.
XX PS
XX XX
XX CC This invention relates to novel antisense compounds useful for modulating
XX the expression of liver related homologue-1 (LRH1) and splice variants
XX thereof. Specifically, it refers to compositions 8-30 nucleobases in
XX length that target a portion of an active site on the nucleic acid
XX molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
XX nuclear receptor protein that functions as a tissue specific
XX transcription factor. The present invention describes antisense
XX oligonucleotides that comprise at least one modified internucleoside
XX linkage, a phosphorothioate linkage; at least one modified sugar moiety,
XX a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
XX methylcytidine. These antisense compounds are useful for treating or
XX diagnosing a disease associated with LRH1, such as breast cancer,
XX dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
XX LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
XX triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
XX hepatitis, as well as hepatocellular carcinoma or a condition associated
XX with aromatase activity. Accordingly, these compositions exhibit
XX cycostatic, antilipaeamic, antarteriosclerotic, anorectic, hepatotropic,
XX litholytic, antiinflammatory and virucidal activities. This

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CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX CC
XX SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 15; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Oy 3026 CAAGCAAGCTTTTCC 3040
XX |||||
XX 1 CAAGCAAGCTTTTCC 15
XX
XX Db
XX
XX RESULT 2784
XX ADO45957/C
XX ID ADO45957 standard; DNA; 20 BP.
XX AC
XX AD ADO45957;
XX DT 15-JUL-2004 (first entry)
XX DE Human oligonucleotide #1323.
XX XX
XX XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; trypsinase a;
XX trypsinase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
XX lung disease; hyper-responsiveness; adenosis; adenosis A receptor;
XX asthma; lung allergy; inflammation; inflammatory disease;
XX airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
XX chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX acute respiratory distress syndrome; pulmonary hypertension;
XX lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX XX
XX OS Homo sapiens.
XX PN US2004049022-A1.
XX PD 11-MAR-2004.
XX XX 25-JUL-2003; 2003US-00627930.
XX PR 23-APR-2002; 2002WO-US011335.
XX PR 23-APR-2002; 2002WO-US011343.
XX XX
XX PA (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUL/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX PI Shahabuddin S, Lu H, Cong H;
XX WI; 2004-293804/27.
XX
XX PT Novel single or multiple target oligonucleotide anti-sense to e.g. CCR1,
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX PT
XX PS Claim 2; SEQ ID NO 1324; 174pp; English.
XX XX
XX CC The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX trypsinase a, trypsinase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
XX also relates to a method of screening a candidate compound that binds to

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CC	one or more nucleic acid target(s) or expressed product(s), for the
CC	prevention and/or treatment of a respiratory or lung disease. The
CC	oligonucleotides are useful for reducing or inhibiting expression of a
CC	gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC	CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC	tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC	useful for preventing or treating a respiratory or lung disease. The
CC	respiratory or lung disease is associated with hyper-responsiveness to
CC	and/or increased levels of, adenosine and/or levels of adenosine A
CC	receptor(s), and/or asthma and/or lung allergies associated with
CC	inflammation or an inflammatory disease. The respiratory or lung disease
CC	is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC	cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC	allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC	hypertension, lung inflammation, bronchitis, airway obstruction or
CC	bronchoconstriction. This sequence represents an oligonucleotide of the
CC	invention.
XX	
SO	Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
Qy	Query Match 0.1%; Score 15; DB 1; Length 20;
Db	Best Local Similarity 100.0%; Pred. No. 2e+03;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	183 CTGCTGCTGCTGGCG 197
	17 CTGCTGCTGCTGGCG 3
RESULT 2785	
AD046124/C	
ID	AD046124 standard; DNA; 20 BP.
XX	
AC	AD046124;
XX	
DT	15-JUL-2004 (first entry)
DE	
XX	Human oligonucleotide #1490.
XX	
XX	Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KM	CCR1; CCR3; Botaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KM	tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KM	lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KM	asthma; lung allergy; inflammation; inflammatory disease;
KM	airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KM	chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KM	acute respiratory distress syndrome; pulmonary hypertension;
KM	lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX	
OS	Homo sapiens.
XX	
PN	US2004049022-A1.
XX	
PD	11-MAR-2004.
XX	
PF	25-JUL-2003; 2003US-00627930.
PR	
PR	23-APR-2002; 2002WO-US013135.
XX	
XX	23-APR-2002; 2002WO-US013143.
XX	
PA	(NYCE/) NYCE J W.
PA	(SAND/) SANDRASAGRA A.
PA	(TANG/) TANG L.
PA	(AGUI/) AGUIAR D.
PA	(MILL/) MILLER S.
PA	(SHAH/) SHAHABUDDIN S.
PA	(LUHH/) LU H.
PA	(CONG/) CONG H.
XX	
PI	Nyce JM, Sandrasagra A, Tang L, Aguiar D, Miller S;
PI	Shahabuddin S, Lu H, Cong H;
XX	
DR	WPI; 2004-293604/27.

XX	Novel single or multiple target oligonucleotide anti-sense to e.g.
PT	Initiation, codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT	RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX	asthma.
PS	Claim 2; SEQ ID NO 1491; 174pp; English.
XX	
CC	The invention relates to oligonucleotides anti-sense to an initiation
CC	codon, coding region, 5' or 3' intron-exon junction, intron or region
CC	with 2-10 nucleotides of the 5'-end and/or 3'-end of a nucleic acid target
CC	chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC	-5 receptor, CCR1, CCR3, Rorakin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC	tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC	also relates to a method of screening a candidate compound that binds to
CC	one or more nucleic acid target(s) or expressed product(s), for the
CC	prevention and/or treatment of a respiratory or lung disease. The
CC	oligonucleotides are useful for reducing or inhibiting expression of a
CC	gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC	CCR1, CCR3, Rorakin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC	tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC	useful for preventing or treating a respiratory or lung disease. The
CC	respiratory or lung disease is associated with hyper-responsiveness to
CC	and/or increased levels of, adenosine and/or levels of adenosine A
CC	receptor(s), and/or asthma and/or lung allergies associated with
CC	inflammation or an inflammatory disease. The respiratory or lung disease
CC	is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC	cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC	allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC	hypertension, lung inflammation, bronchitis, airway obstruction or
CC	bronchoconstriction. This sequence represents an oligonucleotide of the
XX	invention.
XX	
SQ	Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX	
Query Match	0.1%; Score 15; DB 1; Length 20;
Best Local Similarity	100.0%; Pred. No. 2e+03;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0.	
QY	183 CTGCTGCTGCTGGCG 197
Db	17 CTGCTGCTGCTGGCG 3
RESULT 2786	
AD047096/C	
ID	AD047096 standard; DNA; 20 BP.
XX	
AC	AD047096;
XX	
DT	15-JUL-2004 (first entry)
XX	
DE	Human oligonucleotide #2462.
XX	
KW	Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW	CCR1; CCR3; Rorakin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW	tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW	lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW	asthma; lung allergy; inflammation; inflammatory disease;
KW	airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW	chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW	acute respiratory distress syndrome; pulmonary hypertension;
KW	lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX	
OS	Homo sapiens.
XX	
PN	US2004049022-A1.
XX	
PD	11-MAR-2004.
XX	
PF	25-JUL-2003; 2003US-00627930.
XX	
PR	23-APR-2002; 2002WO-US013135.

PR 23-APR-2002; 2002MO-US013143.  
 XX (NYCE/) NYCE J W.  
 XX (SAND/) SANDRASAGRA A.  
 PA (TANG/) TANG L.  
 PA (AGUI/) AGUIAR D.  
 PA (MILL/) MILLER S.  
 PA (SHAH/) SHAHAUDDIN S.  
 PA (LUHH/) LU H.  
 PA (CONG/) CONG H.  
 XX NYCE JW, Sandrasagra A, Tang L, Aguiar D, Miller S,  
 PI Shahabuddin S, Lu H, Cong H;  
 DR WPI; 2004-293804/27.  
 XX  
 PT Novel single or multiple target oligonucleotide anti-sense to e.g.  
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCRI,  
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.  
 PT asthma.  
 XX  
 PS Example 7; Page 164; 174pp; English.  
 XX  
 CC The invention relates to oligonucleotides anti-sense to an initiation  
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region  
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target  
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-  
 CC -5 receptor, CCRI, CCRI, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,  
 CC trypsinase a, trypsinase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention  
 CC also relates to a method of screening a candidate compound that binds to  
 CC one or more nucleic acid target(s) or expressed product(s), for the  
 CC prevention and/or treatment of a respiratory or lung disease. The  
 CC oligonucleotides are useful for reducing or inhibiting expression of a  
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,  
 CC trypsinase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are  
 CC useful for preventing or treating a respiratory or lung disease. The  
 CC respiratory or lung disease is associated with hyper-responsiveness to  
 CC and/or increased levels of, adenosine and/or levels of adenosine A  
 CC receptor(s), and/or asthma and/or lung allergies associated with  
 CC inflammation or an inflammatory disease. The respiratory or lung disease  
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,  
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),  
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary  
 CC hyperextension, lung inflammation, bronchitis, airway obstruction or  
 CC bronchoconstriction. This sequence represents an oligonucleotide of the  
 CC invention.  
 CC  
 XX  
 SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 15; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 183 CTGCTGCTGCTGCG 197  
 Db 17 CTGCTGCTGCTGCG 3  
 RESULT 2787  
 ADR75566  
 ID ADR75566 standard; DNA; 20 BP.  
 XX  
 AC ADR75566;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 51.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytoprotective; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 PN W02004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465655P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 03-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 51; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (i) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O-alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (i); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (i);  
 CC stabilising (i), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (i) and instructions for its use; and a device  
 CC that can be dispense or administer a composition comprising (i). (i) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance.  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (i) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (i) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 15; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2e+03;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2579 CAGGAAGGCTCAAA 2593  
 |||||  
 DB 1 CAGGAAGGCTCAAA 15

RESULT 2788  
 AAQ29058  
 ID AAQ29058 standard; DNA; 18 BP.  
 XX  
 AC AAQ29058;  
 XX  
 XX 25-MAR-2003 (revised)  
 DT 26-FEB-1993 (first entry)  
 XX  
 XX 3' PCR primer located in CH3 region of human IgG1 amplifies H chain.  
 DE  
 XX  
 XX Dicertronic expression vector; fusion PCR; antibody; cDNA library; ss.  
 KM  
 XX  
 OS Synthetic.  
 XX  
 XX WO9215678-A1.  
 PN  
 XX 17-SEP-1992.  
 PD  
 XX 27-FEB-1992; 92WO-US001475.  
 PF  
 XX 01-MAR-1991; 91US-00663442.  
 PR  
 XX  
 XX (STRA-) STRATAGENE.  
 PA  
 XX  
 XX Sorge JA;  
 PI  
 XX WPI; 1992-331724/40.  
 DR  
 XX  
 XX Prod'n. of dicertronic DNA library used to make antibodies, etc.  
 PT includes forming 1st and 2nd PCR admixtures, subjecting them to PCR  
 PT thermo-cycles, seps, double stranded DNA, hybridizing, etc.  
 PT  
 XX  
 PS Claim 14; Page 39; 143pp; English.  
 XX  
 CC This inside PCR primer is used in fusion PCR, working in combination with  
 CC an outside PCR primer to amplify a target nucleic acid sequence, in this  
 CC case the CH3 region of human IgG1 to amplify the entire heavy chain human  
 CC chain variable region. The fusion PCR reaction is used to produce two  
 CC fragments with cohesive termini, which when mixed hybridise to form an  
 CC overlapping DNA duplex that is internally primed. Subsequent PCR extends  
 CC the non-overlapping region to form a hybrid DNA mol. that is dicertronic  
 CC contg. a first polypeptide coding sequence and a second polypeptide  
 CC coding sequence linked by a dicertronic bridge. This method thus allows  
 CC fusion of heavy and light chains prior to vector ligation, avoiding the  
 CC cumbersome separate cloning of fragments. (Updated on 25-MAR-2003 to  
 CC correct PN field.)  
 CC  
 XX  
 SQ Sequence 18 BP; 5 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 550 TTTTCCTTTACCCGAGA 567  
 |||||  
 DB 1 TTATCATTTACCCGAGA 18

RESULT 2789  
 AAQ78934/C  
 ID AAQ78934 standard; DNA; 18 BP.  
 XX  
 AC AAQ78934;  
 XX

XX 25-MAR-2003 (revised)  
 DT 01-AUG-1995 (first entry)  
 XX  
 DE Primer IV-R1 for cloning human immunoglobulin Vh genes.  
 XX  
 XX Primer; PCR; amplify; human; immunoglobulin; variable; heavy chain;  
 KM cosmid; placenta; vector; pJB81; E.coli; mammalian; ss.  
 KM  
 XX  
 OS Synthetic.  
 XX  
 XX WO9426895-A1.  
 PN  
 XX 24-NOV-1994.  
 PD  
 XX 10-MAY-1993; 93WO-JP000603.  
 PF  
 XX 10-MAY-1993; 93WO-JP000603.  
 PR  
 XX  
 XX (NISB ) JAPAN TOBACCO INC.  
 PA  
 XX  
 XX Honjo T, Matsuda F;  
 PI  
 XX WPI; 1995-006791/01.  
 DR  
 XX  
 XX DNA fragment comprising human immunoglobulin Vh genes - for the  
 PT production of human immunoglobulin in mammalian hosts.  
 PT  
 XX  
 XX Example 3; Page 26; 130pp; Japanese.  
 PS  
 XX  
 CC Primers (AAQ78917-38) were used to PCR amplify and clone the human  
 CC immunoglobulin variable heavy chain genes (AAQ78939-79002). The genes  
 CC were isolated from a series of cosmid constructs: Y202; Y103; Y21; Y6; Y24  
 CC 3-31; M84; M18 and M31. The genes are subdivided into 5 families of  
 CC Vh genes. Primers (AAQ78932-5) were used to amplify the family IV Vh  
 CC genes. The fragments cover a region of 800 kb. The DNA fragments were  
 CC isolated from high molecular weight DNA from human placenta. The DNA was  
 CC partially digested with TaqI restriction enzyme. The fragments were  
 CC separated by gel electrophoresis and 35-45 kb fractions were collected.  
 CC The fragments were ligated with ClaI-digested cosmid vector pJB81. The  
 CC ligation products were in vitro packed and infected into E.coli 490A. The  
 CC fragments were then subcloned by colony hybridisation. The Vh genes and  
 CC the DNA fragments encoding them are useful in producing human  
 CC immunoglobulin in mammalian hosts. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 CC  
 XX  
 SQ Sequence 18 BP; 4 A; 2 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4749 ACCCTCTCCTCACCCTCC 4766  
 |||||  
 DB 18 ACCCTGTCCCTCACCCTGC 1

RESULT 2790  
 AAX67192  
 ID AAX67192 standard; RNA; 18 BP.  
 XX  
 AC AAX67192;  
 XX  
 XX 20-JUL-1999 (first entry)  
 DT  
 XX  
 XX Human CD40 hairpin ribozyme target SEQ ID NO:3824.  
 DE  
 XX  
 XX Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KW scleromyeloma; synovial membrane; joint; arthritis; osteoarthritis;  
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KW diagnosis; ss.  
 XX



KM S region; S1a; S1b; S1c; S2; M region; M1; M2; ss.  
 XX Helicobacter pylori.  
 OS  
 XX WO9816658-A2.  
 PN  
 XX 23-APR-1998.  
 PD  
 XX 10-OCT-1997; 97MO-EP005614.  
 PF  
 XX 16-OCT-1996; 96EP-00870131.  
 PR 09-SEP-1997; 97EP-00870133.  
 XX  
 PA (INNO-) INNOGENETICS NV.  
 PI (DDL-) DDL BV.  
 XX Quint W, Van Doorn L;  
 PI WPI; 1998-251300/22.  
 DR  
 XX  
 PT Method for detecting and/or typing Helicobacter pylori strains -  
 PT comprises use of primers and probes based on vacA and cagA gene.  
 PS  
 XX Claim 2; Page 44; 122pp; English.  
 XX  
 CC This invention describes a novel method for the detection and/or typing  
 CC of Helicobacter pylori strains present in a sample using PCR primers and  
 CC probes to detect regions of the vacuolating toxin (vacA) gene and other  
 CC virulence determinant genes (VDG) e.g. the cytotoxin-associated (cagA)  
 CC gene. The method allows the typing and allele-specific detection of a  
 CC strain according to the VDG alleles present in that particular H. pylori  
 CC strain. The virulence determinant genes are the genetic elements involved  
 CC in enabling, determining, and marking the infectivity and/or  
 CC pathogenicity of the H. pylori strain. The method provides a way of  
 CC detecting H. pylori strains in a sample with respect to the development  
 CC of chronic active gastritis, gastric and duodenal ulcers, gastric  
 CC adenocarcinomas, mucosa-associated lymphoid tissue lymphomas, and/or  
 CC determining eradication therapy. AAV73508-V73546 represent PCR primers  
 CC and probes used in the detection of the H. pylori vacA and cagA genes.  
 CC The primers and probes are used especially to detect the vacA S regions  
 CC S1a/b/c and S2 and the M regions M1 and M2 which are represented in  
 CC AAV73547-V73785  
 CC  
 XX Sequence 18 BP; 4 A; 2 C; 3 G; 9 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 4546 CCAAAAAGAAACGCAATT 4563  
 DB 18 CCAAAAAGAAATCGATT 1  
 RESULT 2793  
 ID AAZ21420/c  
 XX AAZ21420 standard; DNA, 18 BP.  
 AC  
 XX AAZ21420;  
 XX  
 DT 02-DEC-1999 (first entry)  
 XX  
 XX Human MEK2 antisense oligonucleotide SEQ ID NO:23.  
 DE  
 XX Human MEK2 kinase; MAPK/ERK kinase; erk activator kinase;  
 KM mitogen activated protein kinase; expression; modulation; antisense;  
 KM diagnosis; hepatocellular carcinoma; breast cancer; proliferation;  
 KM differentiation; development; detection; probe; primer; tumour;  
 KM phosphorothioate; ss.  
 XX  
 XX Synthetic.  
 OS Homo sapiens.  
 XX

PN US5959097-A.  
 XX  
 XX 28-SEP-1999.  
 PD  
 XX  
 XX 20-NOV-1998; 98US-00197378.  
 PF  
 XX 20-NOV-1998; 98US-00197378.  
 XX  
 PR 20-NOV-1998; 98US-00197378.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Monia BP, Cowseert LM;  
 PI WPI; 1999-561077/47.  
 DR  
 XX  
 XX Antisense oligonucleotides of the MEK2 kinase gene, useful in diagnostic  
 PT protocols in vitro and for inhibiting the expression of MEK2 in vivo for  
 PT the treatment of human hepatocellular carcinomas and breast carcinomas.  
 PS  
 XX Claim 11; Col 39; 32pp; English.  
 XX  
 CC The present invention describes antisense oligonucleotides (asMEK2) of  
 CC the human MEK2 dual specificity kinase gene. The MEK2 gene (also called  
 CC MAPK2, mpk2, MAPK/ERK kinase 2, pmrk2 and erk activator kinase)  
 CC represents a convergent target for the regulation of a range of cellular  
 CC processes including proliferation, differentiation and development.  
 CC asMEK2 may be used to inhibit the expression of MEK2 genes in vivo and/or  
 CC in vitro. MEK2 has been shown to be over expressed in some tumour cells.  
 CC Therefore, asMEK2 may be administered to a patient to treat  
 CC hepatocellular carcinomas and breast carcinomas. asMEK2 may also be used  
 CC as a diagnostic tool to specifically inhibit the expression of MEK2  
 CC genes. The role of the inhibited genes in cellular pathways may then be  
 CC evaluated. They may also be used as probes to detect sequences encoding  
 CC MEK2 or as primers for the amplification of those sequences. AAZ21406 to  
 CC AAZ21443 represent specifically claimed asMEK2's from the present  
 CC invention  
 CC  
 XX Sequence 18 BP; 4 A; 4 C; 4 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 3651 GAATTGATGGAACACA 3668  
 DB 18 GCATTTCATGGAACACA 1  
 RESULT 2794  
 ID AAX28316  
 XX AAX28316 standard; DNA, 18 BP.  
 AC  
 XX AAX28316;  
 XX  
 DT 17-JUN-1999 (first entry)  
 XX  
 XX PCR primer for Human CYP3A4 gene exon 12.  
 DE  
 XX CYP3A4 gene polymorphism; polymorphic locus; human; altered metabolism;  
 KM CYP3A4 substrate; drug-drug interaction identification; toxin exposure;  
 KM genetic linkage detection; phenotypic variation; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS Homo sapiens.  
 OS  
 XX WO9913106-A1.  
 PN  
 XX 18-MAR-1999.  
 PD  
 XX 02-SEP-1998; 98WO-US018158.  
 PF  
 XX 10-SEP-1997; 97US-0058612P.  
 PR  
 XX (AXYS-) AXYS PHARM INC.  
 PA

```
XX PI Litcher JB, Guida M;
XX DR WPI, 1999-215070/18.
XX PT New isolated CYP3A4 polymorphic sequences.
XX PS Example; Page 18; 40pp; English.
XX
CC This sequence represents a PCR primer for the human CYP3A4 gene. The
CC invention relates to a CYP3A4 sequence polymorphism, which is part of a
CC non-naturally occurring chromosome. Nucleic acids comprising the CYP3A4
CC polymorphic sequences can be used to screen patients for altered
CC metabolism for CYP3A4 substrates, potential drug-drug interactions, and
CC adverse/side effects as well as diseases that result from environmental
CC or occupational exposure to toxins. They can also be used to establish
CC animal, cell culture and in vitro cell-free models for drug metabolism.
CC Polymorphic CYP3A4 gene sequences can be used for expression studies to
CC determine the effect of promoter and/or intron sequence variations on
CC mRNA expression and stability. The polymorphisms are also used as single
CC nucleotide polymorphisms to detect genetic linkage to phenotypic
CC variation in activity and expression of CYP3A4. The nucleic acids can
CC also be used to generate genetically modified non-human animals or site
CC specific gene modifications in cell lines
XX
SQ Sequence 18 BP; 7 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1632 TTAACCTCCAGACTGCAAG 1649
DB 1 TGAACCTCCAGACTGCAAG 18
RESULT 2795
AAZ48496/C
ID AAZ48496 standard; DNA; 18 BP.
AC AAZ48496;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18889.
XX
KM Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KM inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Claim 1; Col 24; 34pp; English.
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
```

```
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 5 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 169 TGCCTGCGCTGCTGCTGC 186
DB 18 TGCTGACCTGCTGCTGC 1
RESULT 2796
AAZ48498/C
ID AAZ48498 standard; DNA; 18 BP.
AC AAZ48498;
XX
DT 31-MAR-2000 (first entry)
XX
DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18891.
XX
KM Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KM inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US6007995-A.
XX
PD 28-DEC-1999.
XX
PF 26-JUN-1998; 98US-00106038.
XX
PR 26-JUN-1998; 98US-00106038.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowseert LM;
XX
DR WPI; 2000-105333/09.
XX
PT Antisense inhibition of tumor necrosis factor type 1 expression for
PT diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS Example 10; Col 24; 34pp; English.
XX
XX
CC The invention provides antisense compounds targeted to human tumour
CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC can be used in a method of inhibiting the expression of TNFR1 human cells
CC or tissues. The antisense compounds specifically hybridize with one or
CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC produced. The antisense compounds and method are useful as research
CC reagents and diagnostics, and in the treatment and prophylaxis of
CC infection, inflammation or tumour formation. Sequences AAZ48482-565
CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
Query Match 0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 177 CTGCTGCTGCTGCTGCTG 194
```

Db 18 CTGCTGCTGCCGCTGTG 1

|||||

RESULT 2797

AAZ73760

ID AAZ73760 standard; DNA; 18 BP.

XX AAZ73760;

AC

XX 10-SEP-2001 (first entry)

DT

XX Human biallelic marker downstream amplification primer SEQ ID NO:8116.

DE

XX Human genome; biallelic marker; high density disequilibrium map;

XX genomic map; haplotype; phenotype; polymorphic base; genotyping;

KM haplotyping; hybridisation; identification; characterisation;

KW amplification; single nucleotide polymorphism; SNP; PCR primer;

KM diagnosis; ss.

XX

XX Homo sapiens.

OS

XX MO954500-A2.

PN

XX 28-OCT-1999.

PD

XX 21-APR-1999; 99WO-IB000822.

PF

XX 21-APR-1998; 98US-0082614P.

PR

XX 23-NOV-1998; 98US-0109732P.

PS

XX (GENE) GENSET.

PA

XX Cohen D, Blumenfeld M, Chumakov I;

PI

XX WPI; 2000-013267/01.

DR

XX

XX Novel biallelic markers used to construct a high density disequilibrium

PT map of the human genome.

PS

XX Claim 8; Page 1961; 27455P; English.

PS

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present

CC invention, which contain a polymorphic base at position 24 of their

CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification

CC primers for the biallelic markers. The biallelic markers of the invention

CC have a variety of uses: they can be used for high density mapping of the

CC human genome, and in complex association studies and haplotyping studies

CC which are useful in determining the genetic basis for disease states.

CC Compositions and methods of the invention can also be useful for the

CC identification of the targets for the development of pharmaceutical

CC agents and diagnostic methods, as well as the characterisation of the

CC differential efficacious responses to and side effects from

CC pharmaceutical agents acting on a disease as well as other treatment.

CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX

XX Sequence 18 BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

SQ

Query Match 0.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 1.8e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1588 TGATTCTGCGGTCATTG 1605

DB 1 TGATTCTCAGGTCATTG 18

RESULT 2798

AAA92604

ID AAA92604 standard; DNA; 18 BP.

XX

AC AAA92604;

XX

XX 04-JAN-2001 (first entry)

DT

XX

XX Antisense oligonucleotide ISIS# 30423.

DE

XX Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;

KM SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.

KW

XX Synthetic.

OS

XX US6107092-A.

PN

XX 22-AUG-2000.

PD

XX 29-MAR-1999; 99US-00280409.

PF

XX 29-MAR-1999; 99US-00280409.

PR

XX 29-MAR-1999; 99US-00280409.

PS

XX (ISIS-) ISIS PHARM INC.

PA (BAYU) BAYLOR COLLEGE MEDICINE.

PI

XX Cowsett LM, Bennett CF, O'malley BW;

PT

XX WPI; 2000-586211/55.

DR

XX

XX Antisense compounds targeted to steroid receptor RNA activator useful for

PT diagnosis, prophylaxis and treatment of diseases associated with the

PT steroid activator, such as infection, inflammation or tumor formation.

PS

XX Claim 3; Col 42; 47pp; English.

PS

XX The present sequence is one of a large number of antisense

CC oligonucleotides which is directed against one of four human steroid

CC receptor RNA activator (SRA) nucleic acid sequences. Two series of

CC antisense oligonucleotides were synthesised. The first series comprised 8

CC -30 oligodeoxynucleotides with a phosphorothioate backbone. The second

CC series comprised chimeric oligonucleotides composed of a central gap

CC region, consisting of ten 2'-deoxynucleotides, which was flanked on both

CC sides by four-nucleotide wings. The wings were composed of 2'-

CC methoxyethyl (2'-MOE) nucleotides. Both series contained the same

CC nucleotide sequences. The antisense compounds are useful for research,

CC diagnosis, treatment and prophylaxis to prevent or delay infection,

CC inflammation or tumour formation. Therapeutically the oligonucleotides

CC are highly safe and are effectively administered to humans

XX

SQ Sequence 18 BP; 4 A; 9 C; 1 G; 4 T; 0 U; 0 Other;

SQ

Query Match 0.1%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 1.8e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3098 CTCCTACTATCCGCTGAC 3115

DB 1 CTCCTACATCCACTGAC 18

RESULT 2799

AAH63013

ID AAH63013 standard; DNA; 18 BP.

XX

XX AAH63013;

AC

XX 06-AUG-2003 (revised)

DT

XX 11-SEP-2001 (first entry)

DT

XX Shrimp white spot Bacilliform virus (WSBV) oligonucleotide 174.

DE

XX Shrimp white spot Bacilliform virus; WSBV; diagnosis; viral infection;

KM antiviral agent; gene expression; antisense construct; probe; primer;

KW transgenic viral resistant shrimp; ss.

KW

XX Shrimp white spot syndrome virus.

OS





PT animals, comprises the Dermacentor variabilis gamma-aminobutyric acid  
PT (GABA)-gated chloride channel.  
XX  
PS Claim 9; Page 31; 59pp; English.  
XX  
CC The invention relates to gamma-aminobutyric acid (GABA)-gated chloride  
CC channels and their corresponding nucleic acid molecules. GABA-gated  
CC chloride channel proteins and DNA's are useful for preventing and  
CC treating tick infestation, particularly in humans, dogs, cattle, horses,  
CC deer, or other wild or domesticated animals. The nucleic acids are useful  
CC as hybridisation probes or Polymerase Chain Reaction primers for  
CC identifying the presence of Dermacentor variabilis GABA-gated chloride  
CC channel nucleic acid or DNA's encoding for a GABA receptor. The nucleic  
CC acids are also useful for the recombinant expression of D. variabilis  
CC GABA-gated chloride channel proteins. GABA-gated chloride channel  
CC proteins exert toxic effects on other ticks or related parasites such as  
CC mites. The present sequence is Dermacentor variabilis GABA-gated chloride  
CC channel unique region DNA  
XX  
SQ Sequence 18 BP; 0 A; 3 C; 7 G; 8 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 1491 ACAACCCCTACAGGACC 1508  
Db 18 ACAAAACCGACAGGACC 1  
|||||  
  
RESULT 2802  
ABT04994/c  
ID ABT04994 standard; DNA; 18 BP.  
XX  
AC ABT04994;  
XX  
DT 11-OCT-2002 (first entry)  
XX  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 24.  
XX  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX  
XX Homo sapiens.  
XX  
XX WO200248168-A1.  
XX  
XX 20-JUN-2002.  
XX  
XX 22-OCT-2001; 2001WO-US051224.  
XX  
XX 24-OCT-2000; 2000US-00695451.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Baker BF, Cowseert LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX  
XX Example 10; Page 44; 121pp; English.  
XX  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver

CC injury) or a hyperproliferative disorder such as cancer, by inhibiting  
CC the expression of TNFR1. The antisense compound is useful for  
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
CC This polynucleotide sequence represents a human oligonucleotide relating  
CC to the TNFR1 of the invention  
XX  
SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 177 CTGCTGCTGCTGCTGCTG 194  
Db 18 CTGCTGCTGCTGCTGCTG 1  
|||||  
  
RESULT 2803  
ABT04992/c  
ID ABT04992 standard; DNA; 18 BP.  
XX  
AC ABT04992;  
XX  
DT 11-OCT-2002 (first entry)  
XX  
XX TNFR1 expression modulation related antisense oligo SEQ ID No 22.  
XX  
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;  
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;  
XX human; ds.  
XX  
XX Homo sapiens.  
XX  
XX WO200248168-A1.  
XX  
XX 20-JUN-2002.  
XX  
XX 22-OCT-2001; 2001WO-US051224.  
XX  
XX 24-OCT-2000; 2000US-00695451.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Baker BF, Cowseert LM, Zhang H, Dean NM;  
XX WPI; 2002-583481/62.  
XX  
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor  
XX necrosis factor receptor 1 (TNFR1), useful for treating humans having  
XX disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.  
XX  
XX Example 10; Page 44; 121pp; English.  
XX  
XX The invention relates to an antisense compound 8 to 30 nucleotides in  
XX length targeted to nucleic acid molecule encoding tumour necrosis factor  
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of  
XX TNFR1. The antisense compound is useful for inhibiting the expression of  
XX TNFR1 in cells or tissues. The antisense compound is also useful for  
XX treating an animal (preferably human) having a disease or condition  
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver  
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting  
XX the expression of TNFR1. The antisense compound is useful for  
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.  
XX This polynucleotide sequence represents a human oligonucleotide relating  
XX to the TNFR1 of the invention  
XX  
SQ Sequence 18 BP; 5 A; 5 C; 7 G; 1 T; 0 U; 0 Other;  
  
Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 169 TGCCTGCGCTGCTGCTGCTG 186

Db 18 TGCCTGACCTGCTGCTGC 1

## RESULT 2804

ABX03796  
ID ABX03796 standard; cDNA, 18 BP.

XX ABX03796;

DT 09-JAN-2003 (first entry)

DE DNA encoding secreted protein signal peptide sequence #5.

XX Differential display method; leucine-rich motif; transmembrane protein;  
secreted protein; secreted protein signal peptide; ss.

OS Unidentified.

PN WO200259259-A2.

XX 01-AUG-2002.

PF 23-JAN-2002; 2002MO-IL0000071.

XX 23-JAN-2001; 2001US-0263158P.

XX (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.

PI Wreschner DH;

DR WPI; 2002-599769/64.

DR P-PSDB; ABG98325.

PT Differential display method for identifying secreted or transmembrane  
protein, comprises contacting a DNA with a first primer that hybridizes  
to a sequence coding for a leucine-rich motif and with a second  
oligonucleotide primer.

PS Disclosure; Fig 2; 37pp; English.

XX The invention relates to a differential display comprising contacting  
CC cDNA with a first primer that hybridizes to an oligonucleotide sequence  
CC coding for a leucine-rich motif, and with a second oligonucleotide primer  
CC to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from  
CC at least 2 samples, synthesizing cDNA from the RNA of each sample,  
CC contacting the cDNA with a first primer that hybridizes to an  
CC oligonucleotide sequence coding for a leucine-rich motif, and with a second  
CC -hybrid molecule, detecting amplified products, amplifying the cDNA  
CC amplified products, detecting amplified products and comparing the  
CC products coding for at least one secreted or transmembrane protein. The  
CC method is useful for discovering novel secreted and/or transmembrane  
CC proteins which are important for cell processes and play an important  
CC role in determining its phenotype, and which act as mediators for the  
CC transfer of signals from external environment into the cell itself, thus  
CC modulating gene expression. Sequences ABX03792-ABX03869 represent DNA  
CC encoding secreted protein signal peptide sequences

XX Sequence 18 BP; 0 A; 8 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 180 CTGCTGCTGCTGCTGCGC 197

Db 1 CCGCTGCTGCTGCTGCGC 18

RESULT 2805  
ADC99372  
ID ADC99372 standard; DNA, 18 BP.

XX ADC99372;

DT 01-JAN-2004 (first entry)

DE PAMA forward PCR primer - SEQ ID 205.

XX cytosolic; cancer; gene therapy; DGI-2; DGI-5; DGI-7; DGI-9; Hras;  
XX lepton; VEGF; vascular endothelial growth factor receptor; VEGF-R1;  
XX VEGF-R2; VEGF-R3; FLT1; FMS-related tyrosine kinase 1; FLK1; KDR;  
XX kinase insert domain protein receptor; EGFR; epidermal growth factor;  
XX FGFR1; fibroblast growth factor; Tie-1; PCR; ss; primer.

OS Unidentified.

PN WO2003035839-A2.

XX 01-MAY-2003.

PF 24-OCT-2002; 2002MO-US034021.

XX 24-OCT-2001; 2001US-0345471P.

XX (DGI-2) DGI BIOTECHNOLOGIES INC.

PI Pillulula RC, Brissette R, Spruyt M, Dedova O, Blume A;

PI Prendergast J, Goldstein N;

DR WPI; 2003-457332/43.

PT Selecting target and target binder pairs for preparing a composition for  
PT treating cancer by mixing in a reaction vessel phage expressing  
PT biological targets and phage expressing target binders.

PS Example 18; SEQ ID NO 205; 172pp; English.

XX The invention relates to a novel method of selecting target and target  
CC binder pairs comprising mixing in a reaction vessel phage expressing  
CC biological targets and phage expressing target binders, each having  
CC distinguishable selection markers and selecting target and target binder  
CC pairs based on the selection markers. The molecules of the invention  
CC demonstrate cytosolic activity whilst the method may be useful for  
CC selecting target and target binder pairs for preparing a composition for  
CC treating cancer. Furthermore, the method may be utilised during gene  
CC therapy procedures. The current sequence is that of the PCR primer of the  
CC invention.

XX Sequence 18 BP; 2 A; 9 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 60 GCCCAGCCGCGCCATGACC 77

Db 1 GCCCAGCCGCGCCATGACC 18

## RESULT 2806

ACC46880  
ID ACC46880 standard; DNA, 18 BP.

XX ACC46880;

DT 05-JUN-2003 (first entry)

DE Human COPD related gene forward PCR primer SEQ ID NO:159.

XX Human; chronic obstructive pulmonary disease; COPD; chronic lung disease;  
XX PCR primer; ss.

XX Homo sapiens.  
OS Synthetic.

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XX  WO200297127-A2.
XX  05-DEC-2002.
XX  28-MAY-2002; 2002WO-EP005835.
XX  31-MAY-2001; 2001GB-00013266.
XX  (FARB ) BAYER AG.
XX  Oellers N, Gehrmann M, Kaliabis H, Hall R, Schulze T, Kroegel C;
XX  WPL; 2003-140492/13.
XX  Predicting, diagnosing or prognosing chronic lung disease, by detecting a
XX  chronic obstructive pulmonary disease (COPD) gene in a biological sample.
XX  Example 1; Page 213; 214pp; English.
XX  The present invention describes a method for predicting, diagnosing or
XX  prognosing chronic lung disease by detecting a chronic obstructive
XX  pulmonary disease (COPD) gene related polynucleotide (see ACC46750 to
XX  ACC46777, which encode the COPD related proteins in ABP96779 to
XX  ABP96806). The method is useful for predicting, diagnosing or prognosing
XX  chronic lung disease in a biological sample. The COPD genes and proteins
XX  encoded by them from the present invention (I) can be used for treating
XX  or preventing chronic lung disease in a mammal. (I) can be used in an
XX  animal model for determining the efficacy, toxicity, or side effects of
XX  treatment with (I), and determining the mechanism of action of (I).
XX  ACC46778 to ACC46903 represent COPD related PCR primers and probes used
XX  in an example from the present invention
XX  Sequence 18 BP; 0 A; 7 C; 5 G; 6 T; 0 U; 0 Other:
XX  SQ
XX  Query Match 0.1%; Score 14.8; DB 1; Length 18;
XX  Best Local Similarity 88.9%; Pred. No. 1.8e+03;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 178 TGCTGCTGCTGCTGCTGG 195
Db 1 TGCTGCTGCTGCTGCTGG 18
XX  RESULT 2807
XX  AB298324/c
XX  ID AB298324 standard; DNA; 18 BP.
XX  AC AB298324;
XX  DT 17-OCT-2003 (first entry)
XX  DE Human CD23 + A1261 oligonucleotide sequence.
XX  Human; antiense; lung dysfunction; nasal airway dysfunction;
XX  antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX  antiaesthetic; hypotensive; immunosuppressive; cytoskeletal; gene therapy;
XX  antisease gene therapy; respiratory; lung; adenoma sensitivity;
XX  adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX  lung inflammation; respiratory disease; ds.
XX  Homo sapiens.
XX  OS
XX  PN WO200285308-A2.
XX  31-OCT-2002.
XX  23-APR-2002; 2002WO-US013135.
XX  24-APR-2001; 2001US-0286137P.
XX  (EPIG-) EPIGENESIS PHARM INC.
XX

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PI NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahbuddin S;
XX WPL; 2003-229219/22.
XX  Pharmaceutical composition for treating ailments associated with impaired
XX  respiration, has oligo(s) antisease to specific gene(s) or its
XX  corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX  ubiquinone.
XX  Disclosure; SEQ ID NO 13566; 872pp; English.
XX  The invention relates to a novel pharmaceutical composition, which has a
XX  first active agent comprising an oligonucleotide antisease to the
XX  initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX  5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX  junctions of genes encoding a polypeptide associated with lung and/or
XX  nasal airway dysfunction and a second active agent comprising an
XX  antiinflammatory steroid and ubiquinone. A composition of the invention
XX  has antiinflammatory, antiallergic, antiaesthetic, hypotensive,
XX  immunosuppressive, and cytoskeletal activity. The composition may have a
XX  use in antisease gene therapy. The composition is useful for treating or
XX  preventing a respiratory, lung or malignant disease or condition, also
XX  for enhancing the prophylactic or therapeutic respiratory effect of an
XX  antiinflammatory steroid in a subject, for reducing or depleting levels
XX  of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX  receptor, producing bronchodilation, increasing levels of ubiquinone or
XX  lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX  lung inflammation, lung allergies, or a respiratory disease or condition.
XX  Note: The sequence data for this patent is not represented in the printed
XX  specification, but was obtained in electronic format directly from WIPO
XX  at ffp.wipo.int/pub/published_pct_sequences
XX  Sequence 18 BP; 1 A; 5 C; 7 G; 5 T; 0 U; 0 Other:
XX  SQ
XX  Query Match 0.1%; Score 14.8; DB 1; Length 18;
XX  Best Local Similarity 88.9%; Pred. No. 1.8e+03;
XX  Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2965 CTACCAACCAAAACGAGG 2982
Db 18 CTGCCACCCCAACGAGG 1
XX  RESULT 2808
XX  ABX77486/c
XX  ID ABX77486 standard; DNA; 18 BP.
XX  AC ABX77486;
XX  DT 09-APR-2003 (first entry)
XX  DE Human ltrpa gene 3' splice donor site for Exon 48.
XX  LRS responsive CHS1/beige-like anchor gene; ltrpa; cancer;
XX  tumour growth inhibitor; cytoskeletal; gene therapy; tumour; melanoma;
XX  chronic myelogenous leukaemia; adenocarcinoma; lymphoblastic leukaemia;
XX  lung carcinoma; ds; human; mouse.
XX  Homo sapiens.
XX  OS
XX  PN WO200278614-A2.
XX  10-OCT-2002.
XX  02-APR-2002; 2002WO-US010350.
XX  02-APR-2001; 2001US-0280107P.
XX  (UVSF-) UNIV SOUTH FLORIDA.
XX  Kerr WG, Wang J;
XX

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DR WPI; 2003-103233/09.  
 PT A new isolated LPS-responsive and Beige-like Anchor polypeptide useful  
 PT for inhibiting growth of tumors in a patient.  
 XX  
 PS Example 5; Page 45; 79pp; English.  
 CC This invention relates to a novel isolated LPS-responsive and Beige-like  
 CC Anchor (Irida) polypeptide which may be used to inhibit tumour growth. The  
 CC invention also comprises an interfering RNA sequence which may be used to  
 CC suppress Irida function and inhibit tumour growth. The polypeptide and  
 CC small interfering RNA (siRNA) molecules of the invention may have  
 CC cytostatic activity and may be used in gene therapy. Also disclosed is a  
 CC method for inhibiting tumour growth in a patient comprising administering  
 CC to the patient an agent that suppresses Irida function in the patient.  
 CC agent may be a polynucleotide fragment of an Irida gene or its variant, or  
 CC a polypeptide fragment of an Irida gene or its variant or an RNA sequence  
 CC that interferes with the expression of the Irida gene. The method of the  
 CC invention may be used to treat a patient who is suffering from a tumour  
 CC or a cancer, such as breast, prostate, melanoma, cervical or colorectal  
 CC cancer, chronic myelogenous leukemia, adenocarcinoma, lymphoblastic  
 CC leukemia or lung carcinoma. The present sequence represents a DNA  
 CC sequence used within the scope of the invention  
 SQ Sequence 18 BP; 2 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Oy 1113 CTCGAGCACTGAAAAA 1130  
 Db 18 CTCGAGGCGCTGAAAAA 1  
 RESULT 2809  
 ABD31355/C  
 ID ABD31355 standard; DNA; 18 BP.  
 XX  
 AC ABD31355;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX  
 DE Human CD23-derived oligonucleotide SEQ ID 13566.  
 XX  
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;  
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
 KW pulmonary transplantation rejection; ss; primer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200285309-A2.  
 XX  
 PD 31-OCT-2002.  
 XX  
 PF 23-APR-2002; 2002WO-US013143.  
 XX  
 PR 24-APR-2001; 2001US-0286036P.  
 XX  
 PA (EPIC-) EPIGENESIS PHARM INC.  
 XX  
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
 PI Miller S, Tang L, Shahbuddin S;  
 XX  
 DR WPI; 2003-093058/08.  
 PT Pharmaceutical composition for treating asthma, has antisense  
 PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and  
 PT bronchodilating agent.  
 XX  
 PS Claim 15; SEQ ID NO 13566; 763pp; English.  
 CC  
 CC This invention describes a novel composition (a) a first active agent,  
 CC comprising oligonucleotides, effective for alleviating allergies and  
 CC bronchoconstriction, respiratory tract inflammation, allergies and  
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
 CC surfactant depletion or hyposecretion, when administered to a mammal. The  
 CC oligonucleotides are derived from a gene encoding or regulating  
 CC expression of a target polypeptide associated with lung airway or lung  
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
 CC The invention also describes a kit, that comprises: (a) a delivery  
 CC device, in separate containers, (b) the oligonucleotides, (c)  
 CC instructions for adding a carrier and for use of the kit. The composition  
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
 CC analgesic, hypotensive, immunosuppressive and cycostatic activity, is a  
 CC beta-adrenergic agonist. The composition is useful for preventing or  
 CC treating a respiratory, lung or malignant disease. The administered  
 CC composition comprises oligo and is administered to reduce the production  
 CC or availability, or to increase the degradation of the target mRNA or to  
 CC reduce the amount of target polypeptide present in the lungs. The  
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
 CC inflammation, allergies and/or surfactant hypoproduction are associated  
 CC with a disease or condition such as pulmonary vasoconstriction,  
 CC inflammation, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
 CC The reduced adenosine content of the anti-sense oligos corresponding to  
 CC thymidines present in the target RNA serves to prevent the breakdown of  
 CC the oligonucleotides into products that free adenosine into the system  
 CC e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to  
 CC prevent any unwanted effects due to it  
 SQ Sequence 18 BP; 1 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Oy 2965 CTCGACCAAAACGAGG 2962  
 Db 18 CTCGACCAAAACGAGG 1  
 RESULT 2810  
 ADJ60189/C  
 ID ADJ60189 standard; DNA; 18 BP.  
 XX  
 AC ADJ60189;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Oligonucleotide associated to CD23-X04772 #183.  
 XX  
 KW Interleukin; IL-4 receptor; IL-5 receptor; lung disease;  
 KW airway inflammation; allergy; asthma; impeded respiration;  
 KW cystic fibrosis; acute respiratory distress syndrome;  
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;  
 KW ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004011613-A2.  
 XX  
 PD 05-FEB-2004.  
 XX  
 PF 25-JUL-2003; 2003WO-US023509.  
 XX  
 PR 29-JUL-2002; 2002US-0399076P.  
 XX

PA (EPiG-) EPIGENESIS PHARM INC.  
 XX NYce JM, Tang L, Sandraagra A, Aguilar D, Miller S;  
 PI Shahabuddin S, Lu H, Cong H;  
 XX WPI; 2004-203534/19.  
 DR  
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.  
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,  
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory  
 PT disease e.g., asthma.  
 PS  
 XX Claim 2; SEQ ID NO 1045; 85pp; English.  
 CC The present invention relates to an oligonucleotide anti-sense to e.g.,  
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-  
 CC end of nucleic acid target comprising gene(s) chosen from e.g.  
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the  
 CC oligonucleotide and optionally surfactant operatively linked to the  
 CC oligonucleotide. The method is useful for preventing or treating a  
 CC respiratory or lung disease, which involves administering to the airways  
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is  
 CC useful for production of a medicament for the prevention and/or treatment  
 CC of a respiratory or lung disease. The respiratory or lung disease is  
 CC chosen from airway inflammation, allergy(ies), asthma, impeded  
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases  
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome  
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway  
 CC obstruction. The present sequence represents an oligonucleotide of the  
 CC invention.  
 CC  
 XX  
 SQ Sequence 18 BP; 1 A; 5 C; 7 G; 5 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2965 CTACCACCAAAACGAGG 2982  
 DB 18 CTGCCACCAACGAGG 1  
 RESULT 2811  
 ADJ77954/C  
 ID ADJ77954 standard; DNA; 18 BP.  
 XX  
 AC ADJ77954;  
 XX  
 DT 06-MAY-2004 (first entry)  
 DE PA gene SNP genotyping primer.  
 XX  
 KM SNP; single nucleotide polymorphism; phenotype associated gene; PA;  
 KM cardiovascular disease; antiarteriosclerotic; cardiac; vasotropic;  
 KM hypotensive; antiinflammatory; cerebroprotective; gene therapy;  
 KM statin therapy; genotyping; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN EP1388589-A1.  
 PD 11-FEB-2004.  
 PF 09-AUG-2002; 2002EP-00017758.  
 PR 09-AUG-2002; 2002EP-00017758.  
 PA (FARB ) BAYER HEALTHCARE AG.  
 PI Schwens S, Kallabis H, Reifemberger E, Stropp U;  
 XX WPI; 2004-158723/16.

XX  
 PT New polymorphisms of the phenotype associated gene, useful for preparing  
 PT a medicament for treating cardiovascular disease, e.g. atherosclerosis,  
 PT myocardial infarction or stroke, or for predicting adverse drug reaction.  
 XX  
 XX Example; Page 27; 67pp; English.  
 CC The invention relates to a new isolated polynucleotide encoded by a  
 CC phenotype associated (PA) gene, and comprising a sequence selected from  
 CC 21 fully defined sequences of 544-1245 bp with an allelic variation  
 CC contained in a functional surrounding like full length cDNA for PA gene  
 CC polypeptide and with or without the PA gene promoter sequence. The PA  
 CC gene fragments can be used for determining whether a human subject has,  
 CC or is at risk of developing a cardiovascular disease. The method involves  
 CC determining the identity of nucleotide variations in SEQ ID Nos: 1-21 of  
 CC the PA gene locus of the subject, where the single nucleotide  
 CC polymorphism (SNP) class of the SNP is cardiovascular disease (CVD)  
 CC related, and a risk genotype has a risk ratio of greater than 1. The PA  
 CC gene polypeptide or a reagent that modulates its activity may be used in  
 CC the preparation of a medicament for treating CVD (e.g. atherosclerosis,  
 CC ischaemia/reperfusion, hypertension, restenosis, arterial inflammation,  
 CC myocardial infarction, or stroke), or influence drug response. Also  
 CC provided is a method of determining individual response to statin  
 CC therapy, useful in the preparation of a medicament tailored to suit a  
 CC patient's individual response to statin therapy. Sequences ADJ77897-  
 CC ADJ77964 represent oligonucleotide primers used for genotyping PA gene  
 CC using mass spectrometry.  
 CC  
 XX  
 SQ Sequence 18 BP; 1 A; 5 C; 4 G; 8 T; 0 U; 0 Other;  
 QY  
 Query Match 0.1%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 1.8e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 634 AGACAGAGAGAGCCAGC 651  
 DB 18 AGACATAGAGAGCCAGC 1  
 RESULT 2812  
 ADM70070  
 ID ADM70070 standard; DNA; 18 BP.  
 XX  
 AC ADM70070;  
 XX  
 DT 03-JUN-2004 (first entry)  
 DE Plant gene polymorphism marker related primer, SEQ ID 949.  
 XX  
 KM Primer; variation mapping; mutation mapping; plant;  
 KM gene polymorphism marker; ss.  
 XX  
 OS Synthetic.  
 OS JP2003289885-A.  
 PN JP2003289885-A.  
 PD 14-OCT-2003.  
 PF 31-JAN-2003; 2003JP-00024620.  
 PR 01-FEB-2002; 2002JP-00025338.  
 PA (RIKA ) RIKAGAKU KENKYUSHO.  
 PA (SAIM-) SAI MEDIA KK.  
 PA (MATSU/) MATSUI M.  
 PA (NAKA/) NAKAZAWA M.  
 XX WPI; 2004-126231/13.  
 DR  
 XX A primer set and method useful for mapping at least the  
 PT variation/mutation part of a plant gene using a gene polymorphism marker.  
 XX Claim 7; SEQ ID NO 949; 120pp; Japanese.

```

XX CC The present invention relates to a primer set and method for mapping at
CC CC least the variation/mutation part of a plant gene using a gene
CC CC polymorphism marker. A mutation site of the plant gene is mapped by
CC CC utilizing a genetic polymorphism marker as follows: (a) genomic DNA is
CC CC prepared from a plant homozygously having a mutation to be an object of
CC CC the mapping; (b) A forward primer 1 containing a base corresponding to
CC CC the gene polymorphic marker of one ecotype plant, a forward primer 2
CC CC containing a base corresponding to the genetic polymorphism of the other
CC CC ecotype plant and a reverse primer 3 based on the base sequence common
CC CC with both the ecotype plants are prepared; (c) two kinds of
CC CC oligonucleotides emitting fluorescence of different colors when the
CC CC genetic polymorphism marker is detected are prepared; (d) an
CC CC amplification reaction of the genomic DNA is carried out in the presence
CC CC of the primers 1, 2 and 3 and the two kinds of the oligonucleotides; (e)
CC CC the fluorescence intensely emitted from the resultant reaction product
CC CC is detected and (f) the position on the genome of the mutation site is
CC CC determined from the results of detection. The present sequence is a
CC CC primer, used to illustrate the invention.
SQ Sequence 18 BP; 5 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2936 CAGTGGAGGCAACACATT 2953
Db      1 CAGTGGTGCACACACATT 18

RESULT 2813
ADN61698
ID ADN61698 standard; DNA; 18 BP.
AC ADN61698;
XX
XX 01-JUL-2004 (first entry)
DT
XX
XX Corn chromosome 1L SSR marker bnlg 1564 1.09 PCR primer 2 SEQ ID:28.
DE
XX
XX Corn; plant; transformable; introgression; chromosomal locus;
XX bin 6.02-6.04; bin 10.04-10.06; bin 1.03-1.06; bin 1.08-1.11;
XX bin 3.05-3.07; corn seed; plant breeding; transgenic plant;
XX chromosome 1L; SSR marker; marker assisted breeding; PCR; primer; ss.
XX
XX Zea mays.
OS
XX
XX MO2003103377-A2.
XX
XX 18-DEC-2003.
XX
XX 05-JUN-2003; 2003WO-US017626.
XX
XX 06-JUN-2002; 2002US-0386522P.
XX
XX (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX Lowe BA, Chomet P;
XX
XX WPI; 2004-062179/06.
XX
XX Producing a transformable corn line comprises introgressing at least one
XX chromosomal locus mapping to bin 6.02-6.04 or 10.04-10.06, where the
XX locus is introgressed from a more transformable corn line into a less
XX transformable corn line.
XX
XX Example 3; SEQ ID NO 28; 77pp; English.
XX
XX The invention relates to a method of producing a transformable corn line
XX by introgressing at least one chromosomal locus mapping to bin 6.02-6.04
XX or bin 10.04-10.06, where the locus is introgressed from a more
XX transformable corn line into a less transformable corn line. The

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CC CC invention also relates to corn variety 178-187-20 seed (ATCC accession
CC CC no. PTA-5183) and corn variety 178-74-25 seed (ATCC accession no. PTA-
CC CC 5182); progeny of a plant grown from the seed cited above, where the
CC CC progeny comprises loci mapping to chromosomal bins 1.03-1.06, 1.08-1.11,
CC CC 3.05-3.07, and 6.02-6.04; a transgenic corn plant produced by
CC CC transforming the progeny cited above; and hybrid corn seed and plants
CC CC produced by crossing a corn line with the progeny cited above. Because
CC CC more transformable lines are typically agronomically poor, while lines
CC CC with superior or desired agronomic traits tend to be less transformable,
CC CC the methods of the invention provide a means of testing for the effects
CC CC of an introduced gene on traits such as yield, kernel quality and plant
CC CC phenotype in earlier plant generations in a breeding programme. Sequences
CC CC ADN61671-ADN61702 represent PCR primers used in an example of the
CC CC invention to amplify corn SSR markers useful in marker assisted breeding.
SQ Sequence 18 BP; 2 A; 11 C; 1 G; 4 T; 0 U; 0 Other;

Query Match      0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 1.8e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      4752 CTCTCCTCAGCCGCCACC 4769
Db      1 CTCTCCTCAGCCGCCACC 18

RESULT 2814
ADO45678/c
ID ADO45678 standard; DNA; 18 BP.
AC ADO45678;
XX
XX 15-JUL-2004 (first entry)
DT
XX
XX Human oligonucleotide #1044.
DE
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX CCRL1; CCRL3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
XX tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
XX lung disease; hyper-responsiveness; adenosis; adenosis A receptor;
XX asthma; lung allergy; inflammation; inflammatory disease;
XX allergy inflammation; allergy; impeded respiration; cystic fibrosis; CF;
XX chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX acute respiratory distress syndrome; pulmonary hypertension;
XX lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
OS
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHR/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCRL1,

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PT	RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g. asthma.
PS	Claim 2; SEQ ID NO 1045; 174pp; English.
XX	The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the prevention and/or treatment of a respiratory or lung disease. The oligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(s), and/or asthma and/or lung allergies associated with inflammation or an inflammatory disease. The respiratory or lung disease is chosen from airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD), allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the invention.
XX	Seq Sequence 18 BP; 1 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
XX	Query Match 0.1%; Score 14.8; DB 1; Length 18;
XX	Best Local Similarity 88.9%; Pred. No. 1.8e+03;
XX	Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0
OY	2965 CTACCACCAAAACGGAGG 2962
DB	18 CTGCCACCAAAACGGAGG 1
RESULT 2015	
ID	ADR06024/C
XX	ADR06024 standard; DNA; 18 BP.
XX	ADR06024;
XX	21-OCT-2004 (first entry)
DE	Human TNFR1 antisense oligonucleotide seqid 22.
KW	cytostatic; gene therapy; apoptosis inhibitor;
KW	radiation-induced apoptosis; tumour necrosis factor receptor 1; TNFR1;
XX	human; antisense oligonucleotide; antisense technology; ss.
OS	Homo sapiens.
XX	
XX	Key
FT	Location/Qualifiers
FT	1..18
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "OTHER= Phosphorothioate backbone"
FT	1..4
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "OTHER= Optionally 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT	15..18
FT	/*tag= c
FT	/mod_base= OTHER
FT	/note= "OTHER= Optionally 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX	

PV	US0004147471-A1.
XX	
PD	29-JUN-2004.
XX	
PF	06-NOV-2003; 2003US-00702817.
XX	
PR	26-JUN-1998; 98US-00106038.
PR	17-JUN-1999; 99MO-US013763.
PR	24-OCT-2000; 2000US-00695451.
XX	
PA	(ZHAN/) ZHANG H.
XX	
PI	Zhang H;
DR	WPI; 2004-561407/54.
PT	Inhibiting radiation-induced apoptosis in a cell or tissue comprises administering to the cell or tissue an antisense oligonucleotide targeted to a nucleic acid molecule encoding tumor necrosis factor receptor 1.
PT	
PS	Example 10; SEQ ID NO 22; 24pp; English.
XX	
CC	The invention describes a method of inhibiting radiation-induced apoptosis in a cell or tissue comprising administering to the cell or tissue an antisense oligonucleotide of 8-30 nucleotides in length targeted to a nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1). The method and antisense oligonucleotides are useful for inhibiting radiation-induced apoptosis in a cell or tissue, and for treating diseases associated with the expression of TNFR1. This sequence represents a human tumour necrosis factor receptor 1 (TNFR1) antisense oligonucleotide.
CC	
XX	
SQ	Sequence 18 BP; 5 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
OY	Query March 0.1%; Score 14.8; DB 1; Length 18; Best Local Similarity 88.9%; Pred. No. 1.8e+03; Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0  169 TGCGTGCAGTCGTGCTGC 186             18 TGCGTGACCTGCTGCTGC 1
DB	
RESULT 2816	
ID	ADR06026/c
AD	ADR06026 standard; DNA; 18 BP.
AC	ADR06026;
DT	21-OCT-2004 (first entry)
DE	Human TNFR1 antisense oligonucleotide seqid 24.
XX	
KM	cytostatic; gene therapy; apoptosis inhibitor; radiation-induced apoptosis; tumour necrosis factor receptor 1; TNFR1; human; antisense oligonucleotide; antisense technology; ss.
OS	Homo sapiens.
Key	Location/Qualifiers 1..18 /*tag= b /mod_base= OTHER /note= "OTHER= Phosphorothioate backbone" 1..14 /*tag= a /mod_base= OTHER /note= "OTHER= Optionally 2'-O-Methoxyethyl (2'-MOE) nucleosides" 15..18 /*tag= c /mod_base= OTHER /note= "OTHER= Optionally 2'-O-Methoxyethyl (2'-MOE)"
modified_base	
modified_base	
modified_base	



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FT      nucleotides"
XX      US2004147471-A1.
XX      29-JUL-2004.
XX      06-NOV-2003; 2003US-00702817.
XX      26-JUN-1998; 98US-00106038.
XX      17-JUN-1999; 99WO-US013763.
XX      24-OCT-2000; 2000US-00695451.
XX      (ZHANG/ ZHANG H.
XX      Zhang H;
XX      WPI, 2004-561407/54.
XX      Inhibiting radiation-induced apoptosis in a cell or tissue comprises
XX      administering to the cell or tissue an antisense oligonucleotide targeted
XX      to a nucleic acid molecule encoding tumor necrosis factor receptor 1.
XX      Example 10; SEQ ID NO 24; 24pp; English.
XX      The invention describes a method of inhibiting radiation-induced
XX      apoptosis in a cell or tissue comprising administering to the cell or
XX      tissue an antisense oligonucleotide of 8-30 nucleotides in length
XX      targeted to a nucleic acid molecule encoding tumour necrosis factor
XX      receptor 1 (TNFR1). The method and antisense oligonucleotides are useful
XX      for inhibiting radiation-induced apoptosis in a cell or tissue, and for
XX      treating diseases associated with the expression of TNFR1. This sequence
XX      represents a human tumour necrosis factor receptor 1 (TNFR1) antisense
XX      oligonucleotide.
XX      Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
XX      Query Match      0.1%; Score 14.8; DB 1; Length 18;
XX      Best Local Similarity 88.9%; Pred. No. 1.8e+03;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX      177 CTGCTGCTGCTGCTGCTG 194
XX      18 CTGCTGCTGCTGCTGCTG 1
XX      RESULT 2817
XX      ID ADR78958/c
XX      ADR78958 standard; DNA; 19 BP.
XX      ADR78958;
XX      16-DEC-2004 (first entry)
XX      Human apolipoprotein B (ApoB) oligonucleotide seqid 3443.
XX      anti-lipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;
XX      cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;
XX      RNA interference; iRNA; antisense technology; lipid metabolism;
XX      cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX      coronary artery disease; CAD; coronary heart disease; CHD;
XX      atherosclerosis; hepatic glucose production;
XX      glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX      colon cancer; lung cancer; neurological disease; Huntington disease;
XX      spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX      Homo sapiens.
XX      WO2004080406-A2.
XX      23-SEP-2004.
XX      08-MAR-2004; 2004WO-US007070.

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PR      07-MAR-2003; 2003US-0452682P.
PR      12-MAR-2003; 2003US-0434285P.
PR      13-MAR-2003; 2003US-0454962P.
PR      13-MAR-2003; 2003US-0455050P.
PR      14-APR-2003; 2003US-0462894P.
PR      17-APR-2003; 2003US-0463772P.
PR      25-APR-2003; 2003US-0465665P.
PR      25-APR-2003; 2003US-0465802P.
PR      08-MAY-2003; 2003US-0469612P.
PR      08-AUG-2003; 2003US-0493986P.
PR      11-AUG-2003; 2003US-0494597P.
PR      26-SEP-2003; 2003US-0506341P.
PR      09-OCT-2003; 2003US-0510246P.
PR      10-OCT-2003; 2003US-0510318P.
PR      07-NOV-2003; 2003US-0518453P.
XX      (ALNY-) ALNYTAM PHARM.
XX      Manoharan M, Bumcrot D;
XX      WPI, 2004-677362/66.
XX      Interference RNA agent useful for treating dyslipidaemia, coronary artery
XX      disease, diabetes, cancer or neurological disease, comprises sense
XX      sequence and antisense sequence which has specific modifications.
XX      Example 5; SEQ ID NO 3443; 378pp; English.
XX      The invention describes a RNA interference (iRNA) agent (I) comprising a
XX      sense sequence and an antisense sequence, where the sense sequences have
XX      one or more asymmetrical 2'-O alkyl modifications, the antisense
XX      sequences have one or more asymmetrical phosphorothioate modifications
XX      and the antisense sequence targets a human gene sequence. Also described
XX      are: a pharmaceutical preparation comprising (I); reducing (M) apoB-100
XX      levels or glucose-6-phosphatase levels in a subject; producing (I);
XX      stabilising (I), involves selecting a sequence with activity and
XX      introducing one or more asymmetrical modification in the sequence, where
XX      the modification decreases nuclease sensitivity while not decreasing its
XX      activity; a kit comprising (I) and instructions for its use; and a device
XX      that can be dispense or administer a composition comprising (I). (I) is
XX      useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M)
XX      is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX      The subject is suffering from a disorder characterised by elevated or
XX      otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX      levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX      disorder is chosen from the HDL/LDL cholesterol imbalance,
XX      dyslipidaemia, hypercholesterolaemia, statin-resistant
XX      hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX      disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX      inhibit hepatic glucose production or for treating glucose-metabolism-
XX      related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX      treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX      lung cancer), neurological disease (e.g., Huntington disease or
XX      spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX      represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX      can be used to control ApoB gene expression.
XX      Sequence 19 BP; 2 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
XX      Query Match      0.1%; Score 14.8; DB 1; Length 19;
XX      Best Local Similarity 88.9%; Pred. No. 1.9e+03;
XX      Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX      9266 CACGGCATCCACAAACAA 9283
XX      18 CACGGATCCAGAAACAA 1
XX      RESULT 2818
XX      ID ADR76340/c
XX      ADR76340 standard; DNA; 19 BP.
XX      ADR76340;

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XX 16-DEC-2004 (first entry)  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 825.  
XX  
XX  
XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
KM cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KM RNA interference; RNAi; antisense technology; lipid metabolism;  
KM cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KM coronary artery disease; CAD; coronary heart disease; CHD;  
KM atherosclerosis; hepatic glucose production;  
KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KM colon cancer; lung cancer; neurological disease; Huntington disease;  
KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX  
XX 23-SEP-2004.  
XX  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNTY-) ALNTYAM PHARM.  
XX  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX  
XX Interference RNA agent useful for treating dyslipidaemia, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX  
XX Example 5; SEQ ID NO 825; 378bp; English.  
XX  
XX  
XX The invention describes a RNA interference (RNAi) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apob-100  
XX levels or glucose-6-phosphate levels in a subject; producing (I);  
XX stabilising (I); involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nucleic acid sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apob-100 levels or glucose-6-phosphate levels. (MI)  
XX is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemia, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-

CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX  
XX Sequence 19 BP; 2 A; 3 C; 5 G; 9 T; 0 U; 0 Other;  
SQ  
SQ  
Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 9266 CACGCATCCACAACCA 9283  
Db 18 CACGCATCCACAACCA 1  
RESULT 2819  
AAQ44529  
ID AAQ44529 standard; DNA; 19 BP.  
XX  
XX  
XX AAQ44529;  
XX  
XX 25-MAR-2003 (revised)  
DT 26-SEP-1994 (first entry)  
XX  
XX  
DE Antisense oligonucleotide which targets human VCAM-1.  
XX  
XX  
XX Human vascular cell adhesion molecule; VCAM-1; modulation; inflammation;  
XX psoriasis; malignant melanoma; inflammatory bowel disease;  
KM antisense oligonucleotide; therapy; ss.  
XX  
XX  
OS Synthetic.  
XX  
XX  
XX WO9405333-A1.  
XX  
XX  
XX 17-MAR-1994.  
XX  
XX  
XX 27-AUG-1993; 93WO-US008101.  
XX  
XX  
XX 02-SEP-1992; 92US-00939855.  
XX 21-JAN-1993; 93US-00007997.  
XX 17-MAY-1993; 93US-00063167.  
XX  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX  
XX Bennet CF, Mirabelli CK;  
XX  
XX WPI; 1994-100869/12.  
XX  
XX  
XX Oligo:nucleotide modulation of cell adhesion - used in the treatment of  
XX e.g. psoriasis, inflammatory bowel disease or malignant melanoma.  
XX  
XX  
XX Claim 15; Page 58; 101pp; English.  
XX  
XX  
XX Antisense oligonucleotides which target human VCAM-1 were synthesised.  
XX The oligonucleotides are useful to treat diseases which are modulated by  
XX changes in intercellular adhesion molecules. (Updated on 25-MAR-2003 to  
XX correct PN field.)  
XX  
XX  
SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 1141 CTGACGAAATATCCAGA 1158  
Db 1 CTGACGAAATATCTAGA 18  
RESULT 2820

AA01815  
 ID AA01815 standard; DNA; 19 BP.  
 AC AA01815;  
 XX  
 DT 22-DEC-1995 (first entry)  
 XX  
 DE Peptide nucleic acid oligomer targeting VCAM-1 AUG.  
 XX  
 KW peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1;  
 KW endothelial leukocyte; ELAM-1; vascular; VCAM-1; antiinflammatory;  
 KW anticancer; antineoplastic; anti-AIDS; anti-rhinoviral; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key  
 FT misc\_feature  
 FT 1. 19  
 FT /note= "at least one (and preferably all) of the backbone  
 FT subunits are composed of amide units, so that the  
 FT oligomer consists of the nucleobases attached covalently  
 FT to a polyamide backbone"  
 XX  
 PN WO9504749-A1.  
 XX  
 XX 16-FEB-1995.  
 XX  
 PF 05-AUG-1994; 94WO-US009026.  
 XX  
 PR 05-AUG-1993; 93US-00102650.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Bennett CF, Mirabelli CK;  
 DR WPI; 1995-090842/12.  
 XX  
 PT New peptide nucleic acid oligomers hybridizing to adhesion molecule genes  
 PT - are stable anti-sense cpts. of high affinity, partic. for treating  
 PT inflammation, viral infection, cancer etc.  
 XX  
 XX Claim 18; Page 45; 57pp; English.  
 XX  
 CC New oligomers are claimed which (A) have at least one peptide nucleic  
 CC acid (PNA) subunit and (B) have a sequence hybridizable to AUG region,  
 CC coding region, 5'-untranslated region or 3'-untranslated region of ICAM-1  
 CC or ELAM-1, or hybridizable to AUG region, coding region, 5'- untranslated  
 CC region, exon/intron junction region or 3'-untranslated region of VCAM-1.  
 CC The PNAs can be used to target RNA and single stranded DNA (ssDNA) to  
 CC produce antisense-type gene regulation moieties. Hence they may be used  
 CC therapeutically for modulating cellular adhesion and thus as  
 CC antineoplastic agents, anticancer agents, antirhinoviral agents, anti-  
 CC AIDS agents and antiinflammatory agents. They may also be useful as  
 CC diagnostics, e.g. as probes for specific mRNAs. PNA oligomers have high  
 CC affinity for complementary single stranded DNA. They are also able to  
 CC form triple helices in which a first PNA strand binds with RNA or ssDNA  
 CC and a second PNA strand binds with the resulting double helix or with the  
 CC first PNA strand. The PNAs possess no significant charge and are water  
 CC soluble, which facilitates cellular uptake. Further, since they contain  
 CC amides of non-biological amino acids, they are biostable and resistant to  
 CC enzymatic degradation by proteases. The present sequence targets vascular  
 CC cell adhesion molecule-1 (VCAM-1) translation initiation codon (AUG)  
 CC  
 XX Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1141 CTGAGCAAAATATCCAGA 1158  
 DB 1 CTGAGCAAGATATCTAGA 18

RESULT 2821  
 AA03061  
 ID AA03061 standard; DNA; 19 BP.  
 AC AA03061;  
 XX  
 DT 21-JAN-1997 (first entry)  
 XX  
 DE Antisense oligonucleotide #4.  
 XX  
 KW Antisense oligonucleotide; human; intracellular adhesion molecule-1;  
 KW ICAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; E-selectin;  
 KW vascular cell adhesion molecule-1; VCAM-1; white blood cell; bregminal;  
 KW vascular endothelium; allograft rejection; immunosuppression; rapamycin;  
 KW anti-lymphocyte serum; monoclonal antibody; cardiac allograft; therapy;  
 KW renal allograft rejection; donor-specific transplant tolerance; LFA-1;  
 KW ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9615780-A1.  
 XX  
 XX 30-MAY-1996.  
 XX  
 PD 22-NOV-1995; 95WO-US015536.  
 XX  
 PF 23-NOV-1994; 94US-00344155.  
 XX  
 PR (ISIS-) ISIS PHARM INC.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 PI Bennett CF, Stepkowski SM;  
 DR WPI; 1996-268321/27.  
 XX  
 PT Oligo:nucleotide targeted to a nucleic acid sequence encoding ICAM-1,  
 PT ELAM-1 or VCAM-1 - useful for treating or preventing allograft  
 PT rejection.  
 XX  
 XX Disclosure; Page 58; 92pp; English.  
 XX  
 CC AA030211-T30233, AA03058-T33112 and AA03667-T36684 represent antisense  
 CC oligonucleotides of the invention. These sequences target regions of the  
 CC coding sequences for human intercellular adhesion molecule-1 (ICAM-1),  
 CC endothelial leukocyte adhesion molecule-1 (ELAM-1, also known as E-  
 CC selectin), or vascular cell adhesion molecule-1 (VCAM-1). ICAM-1, ELAM-1,  
 CC and VCAM-1 represent three of the five cell adhesion molecules involved  
 CC in the adherence of white blood cells to vascular endothelium. These  
 CC sequences can be used in a composition for treating allograft rejection.  
 CC The composition contains one of these sequences in combination with an  
 CC immunosuppressive agent. The immunosuppressive agent used in the  
 CC compositions is bregminal, rapamycin, anti-lymphocyte serum, a monoclonal  
 CC antibody against LFA-1 or an antisense oligonucleotide. The compositions  
 CC can be used for treating or preventing allograft rejection, such as  
 CC cardiac or renal allograft rejection. By using these compositions,  
 CC allograft survival times are extended, and donor-specific transplant  
 CC tolerance is induced  
 CC  
 XX Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1141 CTGAGCAAAATATCCAGA 1158  
 DB 1 CTGAGCAAGATATCTAGA 18  
 RESULT 2822  
 AA073319  
 ID AA073319 standard; DNA; 19 BP.



```
XX CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX CC
SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1975 AAGAGCTCTGAAGCAAT 1992
Db 2 AAGAGCTCTGTATGCAAT 19

RESULT 2825
AAA84383
ID AAA84383 standard; DNA; 19 BP.
XX
AC AAA84383;
XX
DT 04-DEC-2000 (first entry)
XX
DE Cyclin D2 ribozyme binding site #80.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US028772.
XX
PR 04-DEC-1998; 98US-0110954P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
WP1; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
PS Disclosure; Page 76; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX CC
SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3888 CACCTCAATGCTGAG 3905
Db 1 CTCCTCAATGCTGAG 18
```

```
RESULT 2826
AAZ70246/c
ID AAZ70246 standard; DNA; 19 BP.
XX
AC AAZ70246;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:4602.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (BEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
WP1; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 1212; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ65679 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX CC
SQ Sequence 19 BP; 3 A; 2 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 471 AAACCAAGAACTGTAG 488
Db 18 AAACCAAGAACTGTAG 1

RESULT 2827
AAZ48972
ID AAZ48972 standard; DNA; 19 BP.
XX
AC AAZ48972;
XX
```

DT 29-MAR-2000 (first entry)  
 XX Human ICAM-1 antisense inhibitor.  
 DE  
 XX Antisense inhibitor; human; ICAM-1, intercellular adhesion molecule-1;  
 KM vascular cell adhesion molecule-1; hyperproliferative disorder; VCAM-1;  
 KM endothelial leukocyte adhesion molecule-1; ELAM-1; skin condition;  
 KM cancer; viral infection; tumour; diapedesis; graft versus host disease;  
 KM arthritis; infection; autoimmune disorder; multiple sclerosis; stroke;  
 KM juvenile diabetes mellitus; arthritis; myasthenia gravis; therapy;  
 KM pemphigus vulgaris; systemic lupus erythematosus; acute myocarditis;  
 KM cardiovascular disorder; dilated cardiomyopathy; ischaemic heart disease;  
 KM ss.  
 OS Homo sapiens.  
 XX  
 XX WO961462-A1.  
 PN  
 XX 02-DEC-1999.  
 PD  
 XX 26-MAY-1999; 99MO-US011548.  
 PF  
 XX 27-MAY-1998; 98US-00085759.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX Bennett CF, Mirabelli CK, Baker BF;  
 PI WPI; 2000-072600/06.  
 DR  
 XX New antisense oligonucleotides, used for treating e.g. inflammatory  
 PT conditions, psoriasis, graft rejection, cancers, infections,  
 PT cardiovascular disorders or autoimmune disorders.  
 XX  
 XX Disclosure; Page 182; 1999p; English.  
 PS  
 XX This sequence is an antisense oligonucleotide of the invention. The  
 CC antisense oligonucleotides are targeted to a nucleic acid encoding a  
 CC cellular adhesion molecule (CAM) and is capable of modulating the  
 CC expression of the CAM. They particularly inhibit intercellular adhesion  
 CC molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), or  
 CC endothelial leukocyte adhesion molecule-1 (ELAM-1). The antisense  
 CC oligonucleotides can be used to modulate CAM activity in mediating  
 CC cell-cell interactions and subsequent cellular and biological responses,  
 CC e.g. T cell activation, leukocyte transmigration and inflammation. The  
 CC antisense sequences can be used for modulating the synthesis of a CAM.  
 CC They can be used for treating an animal suspected of having or being  
 CC prone to a disease or condition associated with a CAM. Oligonucleotides  
 CC targeted to ICAM-1 can be used for treating an inflammatory disease or  
 CC condition e.g. inflammatory bowel disease such as Crohn's disease,  
 CC colitis or ulcerative colitis, a condition of the skin, e.g. psoriasis or  
 CC cytotoxic dermatitis, rheumatoid arthritis, allograft rejection, cancer,  
 CC pneumonia, multiple sclerosis or a viral infection. The ICAM-1 sequences  
 CC can also be used for reducing corticosteroid use in a patient or for  
 CC reducing cyclosporine use in a patient. The oligonucleotides can also be  
 CC used for detection and diagnosis. They can also be used for treating e.g.  
 CC hyperproliferative disorders, tumours, diapedesis, graft versus host  
 CC disease, arthritis, infections, autoimmune disorders, e.g. autoimmune  
 CC thyroid disorders, autoimmune forms of arthritis, multiple sclerosis,  
 CC some forms of juvenile diabetes mellitus, myasthenia gravis, pemphigus  
 CC vulgaris, systemic lupus erythematosus, cardiovascular disorders,  
 CC myocardial ischaemia/reperfusion injury, dilated cardiomyopathy, acute  
 CC myocarditis, ischaemic heart disease or stroke  
 CC  
 XX  
 XX Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1141 CTGAGCAAAATATCCAGA 1158  
 DB 1 CTGAGCAAGATATCTAGA 18

RESULT 2828  
 AAA69947  
 ID AAA69947 standard; DNA; 19 BP.  
 XX  
 XX AAA69947;  
 AC  
 XX 19-FEB-2001 (first entry)  
 DT  
 XX RACE PCR primer used to amplify cDNA encoding the human lipase LIPG.  
 DE  
 XX LIPG; lipase; triacylglycerol lipase; high density lipoprotein; HDL;  
 KM low density lipoprotein; LDL; very low density lipoprotein; VLDL;  
 KM cholesterol; apolipoprotein AI; PCR primer; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200057837-A2.  
 PN  
 XX 05-OCT-2000.  
 PD  
 XX 24-MAR-2000; 2000MO-US007870.  
 PF  
 XX 26-MAR-1999; 99US-00277401.  
 PR  
 XX (AVERT ) AVENTIS PHARM PROD INC.  
 PA (UYPE-) UNIV PENNSYLVANIA.  
 XX  
 XX Jaye M, Lynch KJ, Amin DV, Doan KT, Marchadier D, Maugeais C;  
 PI Rader DJ, Krawiec JA, South VJ;  
 XX WPI; 2000-647196/62.  
 DR  
 XX Modulating levels of high density, low density and very low density  
 PT lipoprotein cholesterol and apolipoprotein AI, using LIPG genes or  
 PT polypeptides and modulators of their expression and activity.  
 XX  
 XX Example 3; Fig 1; 171pp; English.  
 PS  
 XX The present sequence represents a PCR primer which was used to amplify  
 CC cDNA encoding a human lipG polypeptide (a lipase enzyme of the  
 CC triacylglycerol lipase family). LipG is synthesised by endothelial cells,  
 CC and is therefore an endothelial lipase. The LIPG polynucleotides and  
 CC polypeptides are used for modulating levels of high density lipoprotein  
 CC (HDL), low density lipoprotein (LDL) and very low density lipoprotein  
 CC (VLDL) cholesterol and apolipoprotein AI. Specifically, HDL cholesterol  
 CC and apolipoprotein AI levels are raised, and LDL and VLDL cholesterol  
 CC levels lowered, by modulating the expression and activity of the LIPG  
 CC polypeptide  
 CC  
 XX  
 XX Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1109 GACTCTCCAGGAAGTGA 1126  
 DB 1 GACATCTCAGGAGACTGAA 18  
 RESULT 2829  
 ABB55038  
 ID ABB55038 standard; DNA; 19 BP.  
 XX  
 XX ABB55038;  
 AC  
 XX 06-DEC-2002 (first entry)  
 DT  
 XX Human epidermal growth factor-like protein PCR primer #2.  
 DE  
 XX Human; ss; EGFP; epidermal growth factor-like protein; PCR; primer.  
 KM

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XX OS Homo sapiens.
XX PN CN1293250-A.
XX PD 02-MAY-2001.
XX PF 18-OCT-1999; 99CN-00123132.
XX PR 18-OCT-1999; 99CN-00123132.
XX PA (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
XX PI Mao Y, Xie Y.
XX DR WPI: 2001-418930/45.
XX PT Epidermal growth factor like protein and a polynucleotide sequence
XX encoding it.
XX PS Example 3; Page 24 (Disclosure); 33pp; Chinese.
XX CC The invention relates to a polynucleotide sequence of separated new
XX CC epidermal growth factor-like protein (EGFp) gene, the polypeptide coded
XX CC by it, the process for preparing the polypeptide, diagnosing the diseases
XX CC relative to the nucleic acid and polypeptide by detecting the mutation of
XX CC nucleic acid and polypeptide levels, and their medical application and
XX CC composite medicines. The present sequence is a PCR primer used to clone
XX CC nucleic acids encoding EGFp.
XX SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.1%; Score 14.8; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4193 TCTAGACCTCTCCACGAA 4210
Db 1 TCTAGACCTCTCCACGCA 18

RESULT 2830
AAH59545
ID AAH59545 standard; DNA; 19 BP.
AC AAH59545;
XX
XX
DT 10-SEP-2001 (first entry)
DE Cyc1in D2 ribozyme binding site SEQ ID NO:1969.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytosolitic;
XX antipsoiatic; dermatological; anti-seborrheic; antidiabetic; vincide;
XX antisticking; ophthalmological; keratolytic; gene therapy; viral wart;
XX basal cell carcinoma; seboreic wart; squamous cell carcinoma;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX

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PA (IMMU-) IMMUSOL INC.
XX
XX PI Robbins JM, Tritz R;
XX PD WPI: 2001-300427/31.
XX PF Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS Example 1; Page 215; 408pp; English.
XX
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoiatic,
XX CC dermatological, cytosolitic, anti-seborrheic, antidiabetic, antisticking,
XX CC ophthalmological, vulnary, keratolytic and vincide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention.
XX SQ Sequence 19 BP; 4 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match
Best Local Similarity 0.1%; Score 14.8; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3888 CACCTCAATGACCTGAG 3905
Db 1 CTCCTCAATGACCTGCG 18

RESULT 2831
AAH57692
ID AAH57692 standard; DNA; 19 BP.
AC AAH57692;
XX
XX
DT 10-SEP-2001 (first entry)
DE Cell-cycle dependent kinase cdk1 ribozyme binding site SEQ ID NO:116.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; reductase; scarring; cytosolitic;
XX antipsoiatic; dermatological; anti-seborrheic; antidiabetic; vincide;
XX antisticking; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seboreic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX PN WO200130362-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029500.
XX PR
XX

```

PR 26-OCT-1999; 99US-0161532P.  
 XX (IMMU-) IMMUSOL INC.  
 XX  
 XX Robbins JM, Tritz R;  
 XX WPI; 2001-300427/31.  
 XX  
 PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 PS  
 XX Example 1; Page 80; 408pp; English.  
 XX  
 CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiproliferative,  
 CC dermatological, cytostatic, antiseborrheic, anti-diabetic, anti-skin,  
 CC ophthalmological, vulvar, keratolytic and virucidal activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention  
 CC  
 SQ Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Db Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1975 AAGAGCTCTGAAAGAT 1992  
 Db 2 AAGAGCTCTGTATGAT 19  
 RESULT 2832  
 ABV78738/c  
 ID ABV78738 standard; DNA; 19 BP.  
 XX  
 AC ABV78738;  
 XX  
 DT 14-JAN-2003 (first entry)  
 XX  
 DE Cordyceps PCR primer SSU.  
 XX  
 KW Ribosome ribonucleic acid, rRNA; Cordyceps crassispota; classification;  
 KW Cordyceps sinensis; ss; PCR; primer.  
 XX  
 OS Cordyceps sp.  
 XX  
 PN JP2002204696-A.  
 XX  
 PD 23-JUL-2002.  
 XX  
 PF 12-JAN-2001; 2001JP-00004805.  
 XX  
 PR 12-JAN-2001; 2001JP-00004805.  
 XX  
 XX (HEAL-) HEALTHWAY KK.  
 PA (KANE/) KANESHIRO N.  
 XX  
 DR WPI; 2002-639075/69.  
 XX

PT Ribosome RNA gene base sequence of Cordyceps sinensis for classification  
 PT of seeds of Cordyceps sinensis.  
 XX  
 XX  
 PS Disclosure; Page 10; 33pp; Japanese.  
 XX  
 CC The invention relates to a novel base sequence which is part of a fully  
 CC defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassispota.  
 CC The base sequences can be used for the classification of Cordyceps  
 CC sinensis. The sequence represents a PCR primer used in the invention  
 XX  
 SQ Sequence 19 BP; 6 A; 6 C; 3 G; 4 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Db Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2644 CCACTGAGCTGGATTAC 2661  
 Db 18 CTATTGAGCTGGATTAC 1  
 RESULT 2833  
 ADC39017  
 ID ADC39017 standard; DNA; 19 BP.  
 XX  
 AC ADC39017;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Human adhesion molecule gene targeted primer #4.  
 XX  
 KW ss; primer; immunosuppressive; antisense therapy;  
 KW corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1;  
 KW extracellular adhesion molecule-1; ELAM-1;  
 KW vascular cell adhesion molecule-1; VCAM-1; corneal explant.  
 XX  
 OS Synthetic.  
 XX Homo sapiens.  
 XX  
 PN WO2003032920-A2.  
 PD 24-APR-2003.  
 XX  
 PF 16-OCT-2002; 2002WO-US033236.  
 XX  
 PR 18-OCT-2001; 2001US-00982262.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Bennett CF, Mirabelli CK;  
 XX  
 DR WPI; 2003-403142/38.  
 XX  
 PT Inhibiting corneal allograft rejection, by contacting an allograft with a  
 PT formulation having an oligonucleotide targeted to intercellular adhesion  
 PT molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion  
 PT molecule-1.  
 XX  
 PS Disclosure; SEQ ID NO 43; 106pp; English.  
 XX  
 CC The invention relates to a method of inhibiting corneal allograft  
 CC rejection, by contacting the allograft with a topical formulation  
 CC comprising an antisense oligonucleotide targeted to intercellular  
 CC adhesion molecule-1 (ICAM-1), extracellular adhesion molecule-1 (ELAM-1)  
 CC or vascular cell adhesion molecule-1 (VCAM-1). The oligonucleotide is  
 CC useful for inhibiting corneal allograft rejection or for preserving a  
 CC corneal explant ex vivo, where the explant is human. This sequence  
 CC corresponds to one of the oligonucleotide of the invention.  
 XX  
 SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 XX  
 QY Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Db Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 2644 CCACTGAGCTGGATTAC 2661  
 Db 18 CTATTGAGCTGGATTAC 1



Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1141 CTGACAAATATCCAGA 1158  
 |||||  
 Db 1 CTGACCAAGATATCTAGA 18

RESULT 2834  
 ADE65692/c  
 ID ADE65692 standard; RNA; 19 BP.  
 AC ADE65692;  
 XX  
 XX 29-JAN-2004 (first entry)  
 DT  
 XX Human c-fos siNA lower strand, SEQ ID NO:147.  
 DE  
 XX RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping;  
 KW central nervous system disorder; Alzheimer's disease;  
 KW Parkinson's disease; Huntington's disease; epilepsy; dementia;  
 KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
 KW polycystic kidney disease; inflammatory disease; allergic disease;  
 KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
 KW vasotrophic; neurotropic; antiparkinsonian; neuroprotective; cytostatic;  
 KW antiinflammatory; anti-allergic; virocidic; anti-HIV; immunosuppressive;  
 KW anticonvulsant; nephrotoxic; human; c-fos; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX MO2003070914-A2.  
 PN  
 XX 28-AUG-2003.  
 PD  
 XX 20-FEB-2003; 2003WO-US005162.  
 PF  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (SIRN-) SIRNA THERAPEUTICS INC.  
 XX  
 PI Mcswlgen J, Beigelman L;  
 XX WPI; 2003-679877/64.  
 DR  
 XX New short interfering nucleic acid downregulates expression of the c-fos  
 PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
 PT inflammation.  
 XX  
 XX Example 3; SEQ ID NO 147; 145bp; English.  
 PS  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the human c-fos gene by RNA interference. The  
 CC siNAs may or may not comprise ribonucleotides and may be double or single  
 CC stranded. They further comprise sense and antisense regions, or  
 CC alternatively are assembled from a sense oligonucleotide and an antisense  
 CC oligonucleotide. Specifically, the siNAs include short interfering RNA  
 CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA  
 CC (shRNA). The siNAs can be unmodified or chemically modified, can contain  
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
 CC vector or enzymatically synthesised. The invention also relates to kits  
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate  
 CC expression of the c-fos gene in cells, tissue explants or organisms  
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the

CC treatment of a variety of conditions. They may be used for treating  
 CC central nervous system lesions and injuries (e.g., Alzheimer's disease,  
 CC Parkinson's disease, Huntington's disease, epilepsy, dementia or  
 CC amyotrophic lateral sclerosis); various cancers; other proliferative  
 CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory  
 CC and/or allergic diseases; viral infections (including HIV infection);  
 CC autoimmune diseases; and transplant rejection. The siNAs are also useful  
 CC for drug screening, diagnosis, therapeutic target identification and  
 CC validation, genetic engineering, pharmacogenomics, studying gene  
 CC function, and gene mapping (e.g., of single nucleotide polymorphisms).  
 CC The present sequence represents the lower strand of a human c-fos-  
 CC targeted double-stranded siNA.  
 CC  
 SQ Sequence 19 BP; 4 A; 4 C; 4 G; 0 T; 7 U; 0 Other;

Query March 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarly 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1626 GAGCAGTTACTCCAGAA 1643  
 |||||  
 Db 19 GAACAGTTATCTCCAGAA 2

RESULT 2835  
 ADE65576  
 ID ADE65576 standard; RNA; 19 BP.  
 XX  
 AC ADE65576;  
 XX  
 XX 29-JAN-2004 (first entry)  
 DT  
 XX Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:31.  
 DE  
 XX RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping;  
 KW central nervous system disorder; Alzheimer's disease;  
 KW Parkinson's disease; Huntington's disease; epilepsy; dementia;  
 KW amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis;  
 KW polycystic kidney disease; inflammatory disease; allergic disease;  
 KW viral infection; HIV infection; autoimmune disease; transplant rejection;  
 KW vasotrophic; neurotropic; antiparkinsonian; neuroprotective; cytostatic;  
 KW antiinflammatory; anti-allergic; virocidic; anti-HIV; immunosuppressive;  
 KW anticonvulsant; nephrotoxic; human; c-fos; target sequence; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX MO2003070914-A2.  
 PN  
 XX 28-AUG-2003.  
 PD  
 XX 20-FEB-2003; 2003WO-US005162.  
 PF  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (SIRN-) SIRNA THERAPEUTICS INC.  
 XX  
 PI Mcswlgen J, Beigelman L;  
 XX WPI; 2003-679877/64.  
 DR  
 XX New short interfering nucleic acid downregulates expression of the c-fos  
 PT gene useful for treatment and diagnosis of diseases, e.g. cancer and  
 PT inflammation.

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XX PS Example 3; SEQ ID NO 31; 145bp; English.
CC CC The invention relates to short interfering nucleic acids (siNA) which
CC CC downregulate expression of the human c-fos gene by RNA interference. The
CC CC siNAs may or may not comprise ribonucleotides and may be double or single
CC CC stranded. They further comprise sense and antisense regions, or
CC CC alternatively are assembled from a sense oligonucleotide and an antisense
CC CC oligonucleotide. Specifically, the siNAs include short interfering RNA
CC CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
CC CC (shRNA). The siNAs can be unmodified or chemically modified, can contain
CC CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC CC vector or enzymatically synthesised. The invention also relates to kits
CC CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC CC of siNA; and vectors that express siNA. The siNAs are used to modulate
CC CC expression of the c-fos gene in cells, tissue explants or organisms
CC CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
CC CC treatment of a variety of conditions. They may be used for treating
CC CC central nervous system lesions and injuries (e.g., Alzheimer's disease,
CC CC Parkinson's disease, Huntington's disease, epilepsy, dementia or
CC CC amyotrophic lateral sclerosis); various cancers; other proliferative
CC CC diseases (e.g., restenosis and polycystic kidney disease); inflammatory
CC CC and/or allergic diseases; viral infections (including HIV infection);
CC CC autoimmune diseases; and transplant rejection. The siNAs are also useful
CC CC for drug screening, diagnosis, therapeutic target identification and
CC CC validation, genetic engineering, pharmacogenomics, studying gene
CC CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC CC The present sequence represents the upper strand of a human c-fos-
CC CC targeted double-stranded siNA, which is identical to the c-fos transcript
CC CC target sequence.
XX SQ Sequence 19 BP; 7 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 1.9e+03;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1626 GAGCAGTTAACTCCAGAA 1643
DB 1 GAACAGUUAUCUCCAGAA 18
RESULT 2836
ADE27538/c
ID ADE27538 standard; RNA; 19 BP.
XX AC ADE27538;
XX DT 29-JAN-2004 (first entry)
XX DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:482.
XX KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
XX KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
XX KW antiarteriosclerotic; cyostatic; virucide; obesity; diabetes;
XX KW atherosclerosis; cancer; viral infection; drug screening;
XX KM genetic engineering; pharmacogenomic; gene mapping; ss.
XX OS Synthetic.
XX PN WO2003070885-A2.
XX PD 28-AUG-2003.
XX PF 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 20-SEP-2002; 2002US-0412304P.

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PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L, Thompson J;
XX DR WPI; 2003-721687/68.
XX PT New short interfering nucleic acid, useful e.g. for treatment of the
XX PT diagnosis of obesity or diabetes, downregulates expression of the
XX PT stearoyl-CoA desaturase gene.
XX PS Example 3; SEQ ID NO 482; 139bp; English.
XX CC The present invention describes a short interfering nucleic acid (siNA)
XX CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
XX CC by RNA interference. Also described: (1) modulating expression of SCD
XX CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
XX CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
XX CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
XX CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cyostatic and
XX CC virucide activities. The siNAs can be used to modulate expression of SCD
XX CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
XX CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
XX CC They can also be used for drug screening; diagnosis; target
XX CC identification and validation; genetic engineering; pharmacogenomics;
XX CC studying gene function and gene mapping (e.g. of single-nucleotide
XX CC polymorphisms). The present sequence represents an SCD siNA, which is
XX CC used in the exemplification of the present invention.
XX SQ Sequence 19 BP; 2 A; 5 C; 7 G; 0 T; 5 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1077 TCACCTCCAAAGCAGGCC 1094
DB 19 TCACCTCCAAAGAGGCC 2
RESULT 2837
ADE27248
ID ADE27248 standard; RNA; 19 BP.
XX AC ADE27248;
XX DT 29-JAN-2004 (first entry)
XX DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:192.
XX KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
XX KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
XX KW antiarteriosclerotic; cyostatic; virucide; obesity; diabetes;
XX KW atherosclerosis; cancer; viral infection; drug screening;
XX KM genetic engineering; pharmacogenomic; gene mapping; ss.
XX OS Synthetic.
XX PN WO2003070885-A2.
XX PD 28-AUG-2003.
XX PF 13-FEB-2003; 2003WO-US004317.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 20-SEP-2002; 2002US-0412304P.
XX PR 15-JAN-2003; 2003US-0440129P.

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XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L, Thompson J;
PI
XX WPI; 2003-712687/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 192; 139pp; English.
XX
XX The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening, diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 5 A; 7 C; 5 G; 0 T; 2 U; 0 Other;

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 77.8%; Pred. No. 1.9e+03;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

OY 1077 TCACCTCGAAGCGGCC 1094
Db 1 UCACCTCGAAGCGGCC 18

RESULT 2838
ADF49516/C
ID ADF49516 standard; RNA; 19 BP.
XX
XX ADF49516;
AC
XX 12-FEB-2004 (first entry)
DT
XX
XX Human BCL2 siNA lower sequence SEQ ID NO:244.
DE
XX
XX ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KM cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KM autoimmune disease; viral infection; HIV.
XX
XX Homo sapiens.
OS
XX
XX WO2003070969-A2.
PN
XX
XX 28-AUG-2003.
PD
XX
XX 18-FEB-2003; 2003WO-US004908.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-036782P.
PR 18-JUL-2002; 2002US-0396905P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX

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PI Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-712622/67.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer or autoimmune disease, downregulates expression of
PT the BCL2 gene.
XX
XX Example 3; SEQ ID NO 244; 148pp; English.
XX
XX The invention relates to a novel short interfering nucleic acid (siNA)
CC that downregulates expression of the BCL2 gene by RNA interference. A
CC siNA of the invention has cytostatic, immunosuppressive, virucide, and
CC anti-HIV activity. The siNA are useful for modulation (inhibition) of
CC expression or activity of BCL2 genes, in cells, tissue explants or
CC organisms, e.g. for treating cancer, autoimmune diseases and viral
CC infections (including by HIV) but also for drug screening, diagnosis,
CC target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function and gene mapping (e.g. of single
CC -nucleotide polymorphisms). The sequences shown in ADF49273-ADF50143
CC represent siNA of the invention.
XX
XX Sequence 19 BP; 8 A; 4 C; 4 G; 0 T; 3 U; 0 Other;

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1587 TTGATTCGTGGGTCATT 1604
Db 19 TTGAATCTGCTGTGTCATT 2

RESULT 2839
ADF4930
ID ADF4930 standard; RNA; 19 BP.
XX
XX ADF4930;
AC
XX 12-FEB-2004 (first entry)
DT
XX
XX Human BCL2 siNA lower sequence SEQ ID NO:658.
DE
XX
XX ss; siNA; human; BCL2; short interfering nucleic acid; RNA interference;
KM cytostatic; immunosuppressive; virucide; anti-HIV; cancer;
KM autoimmune disease; viral infection; HIV.
XX
XX Homo sapiens.
OS
XX
XX WO2003070969-A2.
PN
XX
XX 28-AUG-2003.
PD
XX
XX 18-FEB-2003; 2003WO-US004908.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-036782P.
PR 18-JUL-2002; 2002US-0396905P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J, Beigelman L;
PI
XX
XX WPI; 2003-712622/67.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer or autoimmune disease, downregulates expression of
PT

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PT the BCL2 gene.  
XX  
XX Example 3; SEQ ID NO 658; 148bp; English.  
XX  
CC The invention relates to a novel short interfering nucleic acid (siNA)  
CC that downregulates expression of the BCL2 gene by RNA interference. A  
CC siNA of the invention has cytosolic, immunosuppressive, virucide, and  
CC anti-HIV activity. The siNA are useful for modulation (inhibition) of  
CC expression or activity of BCL2 by RNA interference. siNA are used to  
CC modulate expression of BCL2 genes, in cells, tissue explants or  
CC organisms, e.g. for treating cancer, autoimmune diseases and viral  
CC infections (including by HIV) but also for drug screening, diagnosis,  
CC target identification and validation, genetic engineering,  
CC pharmacogenomics, studying gene function and gene mapping (e.g. of single  
CC -nucleotide polymorphisms). The sequences shown in ADF49273-ADP50143  
CC represent siNA of the invention.  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 4 G; 0 T; 8 U; 0 Other;  
Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 50.0%; Pred. No. 1.9e+03; Indels 0; Gaps 0;  
Matches 9; Conservative 7; Mismatches 2;  
QY 1587 TTGATTCTGGCGGTCATT 1604  
::|||::|||::|||::  
1 UUGAUCUGCUGGUCATU 18  
DB  
RESULT 2840  
ADP31400/c  
ID ADF31400 standard; RNA; 19 BP.  
XX  
XX ADF31400;  
XX  
DT 12-FEB-2004 (first entry)  
XX  
XX Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:65.  
XX  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; cancer;  
XX proliferative disease; restenosis; polycystic kidney disease;  
XX inflammatory disease; allergic disease; autoimmune disease;  
XX transplant rejection; cytostatic; vasotrophic; nephrotropic;  
XX antiinflammatory; antiallergic; immunosuppressive; human;  
XX insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070911-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005044.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswigen J, Beigelman L, Chowrira B;  
XX WPI; 2003-721691/68.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of the insulin-like growth

PT factor-1 receptor gene.  
XX  
XX Example 3; SEQ ID NO 65; 147bp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the human insulin-like growth factor 1  
CC receptor (IGF-1R) gene by RNA interference. The siNA may or may not  
CC comprise ribonucleotides and may be double or single stranded. They  
CC further comprise sense and antisense regions, or alternatively are  
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.  
CC Specifically, the siNA include short interfering RNA (siRNA), double-  
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNA  
CC can be unmodified or chemically modified, can contain  
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a  
CC vector or enzymatically synthesised. The invention also relates to kits  
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes  
CC of siNA; and vectors that express siNA. The siNA are used to modulate  
CC expression of the IGF-1R gene in cells, tissue explants or organisms  
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the  
CC treatment of a variety of conditions. They may be used for treating  
CC cancer and other proliferative diseases (e.g., restenosis and polycystic  
CC kidney disease), inflammatory and/or allergic diseases, autoimmune  
CC diseases and transplant rejection. The siNA are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human IGF-1R-targeted double-stranded  
CC siNA, which is identical to the IGF-1R transcript target sequence.  
XX  
SQ Sequence 19 BP; 5 A; 4 C; 6 G; 0 T; 4 U; 0 Other;  
Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+03; Indels 0; Gaps 0;  
Matches 16; Conservative 0; Mismatches 2;  
QY 378 GTTCCCAGCTCTGCAGC 395  
|||||  
19 GTTCTCAGCTCTGCAGC 2  
DB  
RESULT 2841  
ADP31677  
ID ADF31677 standard; RNA; 19 BP.  
XX  
XX ADF31677;  
XX  
XX 12-FEB-2004 (first entry)  
XX  
XX Human IGF-1R siNA lower strand, SEQ ID NO:342.  
XX  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; cancer;  
XX proliferative disease; restenosis; polycystic kidney disease;  
XX inflammatory disease; allergic disease; autoimmune disease;  
XX transplant rejection; cytostatic; vasotrophic; nephrotropic;  
XX antiinflammatory; antiallergic; immunosuppressive; human;  
XX insulin-like growth factor 1 receptor; IGF-1R; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070911-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005044.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 29-AUG-2002; 2002US-0406784P.

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PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-721691/68.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of cancer, downregulates expression of the insulin-like growth
XX factor-1 receptor gene.
XX
XX Example 3; SEQ ID NO 342; 147bp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human insulin-like growth factor 1
XX receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
XX comprise ribonucleotides and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively they
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA), double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
XX can be unmodified or chemically modified, can contain
XX deoxyribonucleotides, and can be chemically synthesised, expressed from a
XX vector or enzymatically synthesised. The invention also relates to kits
XX for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
XX of siNA; and vectors that express siNA. The siNAs are used to modulate
XX expression of the IGF-1R gene in cells, tissue explants or organisms
XX (e.g., by ex vivo gene therapy), or in grafts and transplants for the
XX treatment of a variety of conditions. They may be used for treating
XX cancer and other proliferative diseases (e.g., restenosis and polycystic
XX kidney disease), inflammatory and/or allergic diseases, autoimmune
XX diseases, and transplant rejection. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the lower strand of a human IGF-1R-targeted double-stranded
XX siNA.
XX
XX Sequence 19 BP; 4 A; 6 C; 4 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 66.7%; Pred. No. 1.9e+03;
XX Matches 12; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
XX
XX 378 GTTCCCGAGCTTCGAGC 395
XX 1 GGUUCUCCAGCUCUGAAGC 18
XX
XX RESULT 2842
XX ADF83969
XX ADF83969 standard; RNA; 19 BP.
XX
XX ADF83969;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human breakpoint cluster region-targeted siRNA - SEQ ID 263.
XX
XX short interfering nucleic acid; siNA; breakpoint cluster region;
XX v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX cytosolic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
XX Homo sapiens.
XX
XX WO2003070972-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX

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XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 15-AUG-2002; 2002US-0404039P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 14-JAN-2003; 2003US-0439922P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B;
XX WPI; 2003-679889/64.
XX
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
XX and diagnosis of leukemia and lymphoma, downregulates the breakpoint
XX cluster region-Abelson (BCR-ABL) gene.
XX
XX Example 7; SEQ ID NO 263; 197bp; English.
XX
XX The invention relates to a novel double-stranded short interfering
XX nucleic acid (siNA) that downregulates expression of the breakpoint
XX cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
XX (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
XX activity and may be useful for modulating expression of the BCR-ABL gene,
XX as well as for treating leukaemia or lymphoma and in diagnosis, drug
XX screening, target identification and validation, genetic engineering,
XX gene function studies and gene mapping. The current sequence is that of
XX the human BCR-targeted siRNA of the invention.
XX
XX Sequence 19 BP; 2 A; 7 C; 4 G; 0 T; 6 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 61.1%; Pred. No. 1.9e+03;
XX Matches 11; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
XX
XX 387 CTCTGCGAGCTTCATCTG 404
XX 2 CGUGCGUCUCUACUCCUG 19
XX
XX RESULT 2843
XX ADF84232/c
XX ADF84232 standard; RNA; 19 BP.
XX
XX ADF84232;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human breakpoint cluster region-targeted siRNA - SEQ ID 526.
XX
XX short interfering nucleic acid; siNA; breakpoint cluster region;
XX v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
XX cytosolic; leukaemia; lymphoma; human; BCR; ss; siRNA.
XX
XX Homo sapiens.
XX
XX WO2003070972-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005234.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 15-AUG-2002; 2002US-0404039P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 14-JAN-2003; 2003US-0439922P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX

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PR 14-JAN-2003; 2003US-0439922P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PI Mcswiggen J, Beigelman L, Chowrira B;  
 XX WPI; 2003-679889/64.  
 DR  
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of leukemia and lymphoma, downregulates the breakpoint  
 PT cluster region-Abelson (BCR-ABL) gene.  
 XX  
 PS Example 7; SEQ ID NO 526; 197bp; English.  
 XX  
 CC The invention relates to a novel double-stranded short interfering  
 CC nucleic acid (siRNA) that downregulates expression of the breakpoint  
 CC cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1  
 CC (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic  
 CC activity and may be useful for modulating expression of the BCR-ABL gene,  
 CC as well as for treating leukemia or lymphoma and in diagnosis, drug  
 CC screening, target identification and validation, genetic engineering,  
 CC gene function studies and gene mapping. The current sequence is that of  
 CC the human BCR-targeted siRNA of the invention.  
 CC  
 SQ Sequence 19 BP; 6 A; 4 C; 7 G; 0 T; 2 U; 0 Other;  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 387 CTCTGACGCTTCATCCTG 404  
 Db 18 CGCTGCTGCTTCATCCTG 1  
 XX  
 RESULT 2844  
 ADK96088/c  
 ID ADK96088 standard; DNA; 19 BP.  
 XX  
 AC ADK96088;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Primer of the invention #1808.  
 XX  
 KW human; single nucleotide polymorphism; SNP; ss; primer.  
 XX  
 OS Synthetic.  
 XX  
 PN JP2003259875-A.  
 XX  
 PD 16-SEP-2003.  
 XX  
 PF 08-MAR-2002; 2002JP-00064373.  
 XX  
 PR 08-MAR-2002; 2002JP-00064373.  
 XX  
 PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
 XX  
 PA WPI; 2004-093977/10.  
 DR  
 PT Novel polynucleotide useful for PCR amplification along with two DNA  
 PT fragment from another set of sequences, or for detecting single  
 PT nucleotide polymorphism in human gene.  
 XX  
 PS Claim 2; SEQ ID NO 5117; 2627bp; Japanese.  
 XX  
 CC The present invention relates to a polynucleotide isolated from a human  
 CC gene and is useful for detecting a single nucleotide polymorphism in a  
 CC human gene or for diagnosing of disease. The invention enables the  
 CC detection of a single nucleotide polymorphism in a human gene. The  
 CC present sequence represents a primer of the invention.

XX  
 SQ Sequence 19 BP; 2 A; 4 C; 8 G; 5 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 2496 CATGACCTCAGCTCCTG 2513  
 Db 18 CAGACCCACGACTCCTG 1  
 XX  
 RESULT 2845  
 ADK97550/c  
 ID ADK97550 standard; DNA; 19 BP.  
 XX  
 AC ADK97550;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Primer of the invention #3270.  
 XX  
 KW human; single nucleotide polymorphism; SNP; ss; primer.  
 XX  
 OS Synthetic.  
 XX  
 PN JP2003259875-A.  
 XX  
 PD 16-SEP-2003.  
 XX  
 PF 08-MAR-2002; 2002JP-00064373.  
 XX  
 PR 08-MAR-2002; 2002JP-00064373.  
 XX  
 PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.  
 XX  
 PA WPI; 2004-093977/10.  
 DR  
 PT Novel polynucleotide useful for PCR amplification along with two DNA  
 PT fragment from another set of sequences, or for detecting single  
 PT nucleotide polymorphism in human gene.  
 XX  
 PS Claim 2; SEQ ID NO 6579; 2627bp; Japanese.  
 XX  
 CC The present invention relates to a polynucleotide isolated from a human  
 CC gene and is useful for detecting a single nucleotide polymorphism in a  
 CC human gene or for diagnosing of disease. The invention enables the  
 CC detection of a single nucleotide polymorphism in a human gene. The  
 CC present sequence represents a primer of the invention.  
 XX  
 SQ Sequence 19 BP; 5 A; 2 C; 11 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 OY 1297 GCTCCACTCAGATCCTCC 1314  
 Db 19 GCTCCACTCCTCCCTCC 2  
 XX  
 RESULT 2846  
 ADJ97258  
 ID ADJ97258 standard; DNA; 19 BP.  
 XX  
 AC ADJ97258;  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Human VEGF DNA sequence, a target for siRNA inhibition SeqID 31.  
 XX  
 KW human; ss; short interfering RNA; siRNA; angiogenesis;  
 KW vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1;

KW Flk-1/KDR; kinase domain region; diabetic retinopathy;  
 KW age-related macular degeneration; inflammatory disease; psoriasis;  
 KW rheumatoid arthritis; cancer; breast; retinoblastoma; Wilms' tumor;  
 KW lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;  
 KW antipsoriatic; antineumatic; antiarthritic.  
 OS Homo sapiens.  
 XX WO2004009769-A2.  
 XX 29-JAN-2004.  
 XX 18-JUN-2003; 2003WO-US022444.  
 XX 24-JUN-2002; 2002US-0398417P.  
 XX 14-NOV-2002; 2002US-00294228.  
 XX (UNVE-) UNIV PENNSYLVANIA.  
 XX Tolentino MJ, Reich SJ;  
 XX WPI; 2004-203472/19.  
 DR Novel short interfering RNA (siRNA) comprises sense and antisense RNA  
 PT strands useful for inhibiting expression of human vascular endothelial  
 PT growth factor mRNA, for treating angiogenic disease, e.g. diabetic  
 PT retinopathy and cancer.  
 XX Disclosure; SEQ ID NO 31; 218pp; English.  
 XX This invention relates to novel compositions that comprise short  
 CC interfering RNA (siRNA) molecules, which can be used to inhibit  
 CC angiogenesis. Specifically, it refers to siRNAs that target and cause  
 CC RNAi-induced degradation of mRNA from human vascular endothelial growth  
 CC factor (VEGF), the VEGF receptor (Flt-1) and the Flk-1/KDR (kinase domain  
 CC region) genes, as well as mutants derived thereof. The present invention  
 CC describes sense and antisense RNA strands that form an RNA duplex and  
 CC bind to the target mRNA, such that expression is inhibited and the target  
 CC degraded. As such, siRNA administered in combination with a therapeutic  
 CC agent is useful for treating diseases associated with angiogenesis and  
 CC the overexpression of VEGF, which include diabetic retinopathy, age-  
 CC related macular degeneration, inflammatory disease, psoriasis and  
 CC rheumatoid arthritis. Furthermore, it can be used to treat various  
 CC cancers including breast, retinoblastoma, Wilms' tumor and lymphoma.  
 CC Accordingly, these compositions exhibit cytostatic, antidiabetic,  
 CC ophthalmological, antiinflammatory, antipsoriatic, antineumatic and  
 CC antiarthritic activities. This oligonucleotide is a human VEGF DNA oligo,  
 CC a target for siRNA inhibition of the invention.  
 XX Sequence 19 BP; 5 A; 2 C; 4 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 4559 GCATTGTGTCACAGA 4576  
 DB 1 GCATTGTGTCACAGA 19  
 RESULT 2847  
 ADM46494  
 ID ADM46494 standard; DNA; 19 BP.  
 XX  
 AC ADM46494;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Antisense oligonucleotide targeting human VCAM-1 #4.  
 XX  
 XX Antisense; ss; human; intercellular adhesion molecule; ICAM-1;  
 KW vascular cell adhesion molecule; VCAM-1;  
 KW endothelial leukocyte adhesion molecule; ELAM-1;

KW inflammatory ophthalmological disorder; redness; inflammation;  
 KW corneal explant; corneal allograft rejection.  
 XX  
 OS Homo sapiens.  
 XX US2004033977-A1.  
 XX 19-FEB-2004.  
 XX 04-JUN-2003; 2003US-00454663.  
 XX 14-AUG-1990; 90US-00567286.  
 XX 02-SEP-1992; 92US-00939855.  
 XX 21-JAN-1993; 93US-00007987.  
 XX 10-FEB-1993; 93US-00969151.  
 XX 17-MAY-1993; 93US-00063167.  
 XX 12-MAY-1995; 95US-00440740.  
 XX 03-AUG-1998; 98US-00128496.  
 XX 12-SEP-2000; 2000US-00659288.  
 XX 18-OCT-2001; 2001US-00982262.  
 XX (BENNETT) BENNETT C F.  
 XX (MIRA) MIRABELLI C.  
 XX Bennett CF, Mirabella C;  
 PI Bennett CF, Mirabella C;  
 DR WPI; 2004-180090/17.  
 XX  
 PT New antisense oligonucleotide, useful for diagnosing, as research  
 PT reagents and for treating disease states, which respond to modulation of  
 PT the synthesis or metabolism of cell adhesion molecules.  
 XX Disclosure; SEQ ID NO 43; 72pp; English.  
 XX The invention relates to an antisense oligonucleotide targeting human  
 CC intercellular adhesion molecule (ICAM-1) having a sequence appearing as  
 CC ADM46473. In the oligonucleotide, at least one adenosine nucleotide is  
 CC replaced with a thymidine, cytidine or guanosine nucleotide, at least one  
 CC thymidine nucleotide is replaced with an adenosine, cytidine or guanosine  
 CC nucleotide, at least one guanosine nucleotide is replaced with an  
 CC adenosine, thymidine or cytidine nucleotide or at least one cytidine  
 CC nucleotide is replaced with an adenosine, cytidine or guanosine  
 CC nucleotide. The oligonucleotide is one of 88 disclosed antisense  
 CC oligonucleotides targeting ICAM-1, vascular cell adhesion molecule (VCAM-  
 CC 1) or endothelial leukocyte adhesion molecule (ELAM-1). Also included are  
 CC an RNA compound 8-80 nucleobases in length targeted to human ICAM-1 mRNA  
 CC (where the compound specifically hybridizes with the human ICAM-1 mRNA  
 CC and inhibits the expression of human ICAM-1 mRNA), and a double stranded  
 CC RNA compound having the RNA equivalent sequence of ADM46473. The  
 CC oligonucleotide is useful for modulating the activity of the RNA and DNA  
 CC and the modulation of the synthesis and metabolism of specific cell  
 CC adhesion molecules. It is also useful for the diagnosis, as research  
 CC reagents and for treating disease states, which respond to modulation of  
 CC the synthesis or metabolism of cell adhesion molecules. The  
 CC oligonucleotide is suitable for treating inflammatory ophthalmological  
 CC disorders including redness and inflammation caused by allergens and  
 CC allergic reactions. The oligonucleotides can also be used to preserve  
 CC corneal explants ex vivo and to prevent corneal allograft rejections. The  
 CC specific hybridisation exhibited by the oligonucleotides may be used for  
 CC assays, purifications or cellular product preparations. The present  
 CC sequence is an antisense oligonucleotide targeting VCAM-1.  
 XX Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1141 CTGACCAAAATATCCAGA 1158  
 DB 1 CTGACCAAGATATCTAGA 18

```
RESULT 2848
ADP18220
ID ADP18220 standard; DNA; 19 BP.
XX
AC ADP18220;
XX
DT 09-SEP-2004 (first entry)
XX
DE Human cancer diagnosis-related partial plexinB1 gene sequence #12.
XX
KW cancer; tissue sample; plexinB1; cytosolic; Plexin-Antagonist-B-1;
KW gene therapy; prostate cancer; breast cancer; tumour invasiveness; gene;
KW ds; human.
XX
OS Homo sapiens.
XX
PN WO2004050914-A1.
XX
PD 17-JUN-2004.
XX
PF 28-NOV-2003; 2003WO-GB005223.
XX
PR 29-NOV-2002; 2002GB-00027908.
XX
PA (UCLB-) UCL BIOMEDICA PLC.
XX
PI Williamson M, Masters J;
XX
DR WPI; 2004-450743/42.
XX
PT Assessing an individual for a cancer condition, useful for treating e.g.
PT breast cancer, comprising determining the presence in a tissue sample of
PT one or more cells comprising a plexinB1 nucleic acid sequence having one
PT or more mutations.
XX
PS Disclosure; Fig 3; 97pp; English.
XX
CC This invention relates to a novel method of assessing an individual for a
CC cancer condition which comprises providing a tissue sample obtained from
CC the individual, determining the presence in the sample of one or more
CC cells comprising a plexinB1 nucleic acid sequence having one or more
CC mutations, the presence of the cells being indicative of the individual
CC having a cancer condition. The invention may be useful for the
CC development of compounds with a cytostatic activity acting as a plexin-
CC antagonist-B-1 whilst the sequences disclosed may prove useful for gene
CC therapy. The method is useful for assessing an individual for a cancer
CC condition particularly prostate cancer or breast cancer. The
CC pharmaceutical compound is useful for a method of treatment and for
CC manufacturing a medicament for treating cancer. A nucleic acid encoding
CC plexinB1 or mutant plexinB1 polypeptide or its complement or fragment is
CC useful in a method of treatment, particularly cancer and for
CC manufacturing a medicament for treating cancer. A method comprising
CC reducing the activity of mutant plexinB1 polypeptide in one or more cells
CC of an individual by administering an antagonist of mutant plexinB1 is
CC useful for treating a cancer condition in the individual, where such
CC activity is reduced by decreasing or abolishing expression of the mutant
CC plexinB1 polypeptide or expression of the mutant plexin B1 polypeptide is
CC abolished or reduced by administering a nucleic acid above. The method is
CC also useful for reducing the invasiveness of a tumour in an individual.
CC The methods are useful for characterising a cancer condition, for example
CC for prognostic purposes. The present sequence is that of a region of the
CC human plexinB1 gene in which a mutation used in the method of the
CC invention was identified.
XX
SQ Sequence 19 BP; 8 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3983 CAATATACCTTGAAACAA 4000
Db 2 CAATACACCTTGAAACGA 19
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RESULT 2849
ADQ62694
ID ADQ62694 standard; RNA; 19 BP.
XX
AC ADQ62694;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-VEGF siRNA SEQ ID NO:2397.
XX
KW siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMAACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 16; SEQ ID NO 2397; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGUAGUGAUGAAGU, GAAGUACUCCAUUUAAG;
CC GUACGACAAACCGGAGAU, AGAUGUAGUAGAUACAU, UGAAGACUUGUCUAGUU;
CC CUGGCGCCUCUGUUGA, UCGGCGCCUCUGUAGAU, GAGAUAGUGAUGAUGACA;
CC GAGAUAGUGAUGAUGAUG, and GAAGACUUGUCUAGUUG. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 6 A; 1 C; 5 G; 0 T; 7 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 50.0%; Pred. No. 1.9e+03;
Matches 9; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
QY 4553 GAAACGACATTGTTGTTGT 4570
Db 1 GAGAAAGCAUUGUUGUUGU 18
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RESULT 2850



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AD061480
ID AD061480 standard; RNA; 19 BP.
XX
AC AD061480;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-FCOS siRNA related DNA sequence SEQ ID NO:1182.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
XX RNA interference.
XX
OS Synthetic.
XX
PN MO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003MO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
XX PT by selecting a target gene and measuring the functionality of the
XX PT nucleotide sequences that are complementary to a stretch of nucleotides
XX PT of the target sequence.
XX
PS Example 12; SEQ ID NO 1182; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
XX CC interfering RNA) comprising selecting an siRNA molecule of 19-25
XX CC nucleoside bases by selecting a target gene and measuring the
XX CC functionality of sequences of 19-25 nucleotides in length that are
XX CC substantially complementary to a stretch of nucleotides of the target
XX CC sequence, where the functionality is dependent upon non-target specific
XX CC criteria. Also claimed are methods for gene-silencing, developing an
XX CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
XX CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
XX CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
XX CC sequence consisting of GGGAGAUUGAUGAUGAUA; GAAGUACUUCUCCAGUUU;
XX CC GUACGACACCGGAGAU; AGAUUGAUGAUGAUAU; UGAAGACUUCUCCAGUUU;
XX CC GAUGGCGCUCUUGUUA; UGCAGCUCUUGUUAU; GAGAUUGAUGAUGAUA;
XX CC GGAGAUUGAUGAUGAUA; and GAAGACUUCUCCAGUUU. The siRNA molecule
XX CC comprises a sense strand and an anti-sense strand. The siRNA molecule
XX CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
XX CC pairs. The kit comprises at least two siRNA, comprising a first optimised
XX CC siRNA and a second optimised siRNA. The method is useful in selecting
XX CC siRNA for generating a gene silencing reagent. The present sequence is
XX CC used in the exemplification of the invention. The sequence is shown in
XX CC the specification as DNA, but described as siRNA.
XX
SQ Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1626 GAGCAGTTAATCCAGAA 1643
Db 1 GAACAGTTATCTCCAGAA 18
RESULT 2851
AD061244
ID AD061244 standard; RNA; 19 BP.

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XX
AC AD061244;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-CCNB1 siRNA related DNA sequence SEQ ID NO:946.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
XX RNA interference.
XX
OS Synthetic.
XX
PN MO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003MO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
XX
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
XX PT by selecting a target gene and measuring the functionality of the
XX PT nucleotide sequences that are complementary to a stretch of nucleotides
XX PT of the target sequence.
XX
PS Example 12; SEQ ID NO 946; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
XX CC interfering RNA) comprising selecting an siRNA molecule of 19-25
XX CC nucleoside bases by selecting a target gene and measuring the
XX CC functionality of sequences of 19-25 nucleotides in length that are
XX CC substantially complementary to a stretch of nucleotides of the target
XX CC sequence, where the functionality is dependent upon non-target specific
XX CC criteria. Also claimed are methods for gene-silencing, developing an
XX CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
XX CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
XX CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
XX CC sequence consisting of GGGAGAUUGAUGAUGAUA; GAAGUACUUCUCCAGUUU;
XX CC GUACGACACCGGAGAU; AGAUUGAUGAUGAUAU; UGAAGACUUCUCCAGUUU;
XX CC GAUGGCGCUCUUGUUA; UGCAGCUCUUGUUAU; GAGAUUGAUGAUGAUA;
XX CC GGAGAUUGAUGAUGAUA; and GAAGACUUCUCCAGUUU. The siRNA molecule
XX CC comprises a sense strand and an anti-sense strand. The siRNA molecule
XX CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
XX CC pairs. The kit comprises at least two siRNA, comprising a first optimised
XX CC siRNA and a second optimised siRNA. The method is useful in selecting
XX CC siRNA for generating a gene silencing reagent. The present sequence is
XX CC used in the exemplification of the invention. The sequence is shown in
XX CC the specification as DNA, but described as siRNA.
XX
SQ Sequence 19 BP; 7 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1528 CTAATTACCTGATGAAC 1545
Db 1 CCAATACCTGATGAAC 18
RESULT 2852
AD062695
ID AD062695 standard; RNA; 19 BP.
AC AD062695;

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XX 09-SEP-2004 (first entry)
XX Anti-VEGF siRNA SEQ ID NO:2398.
XX
XX ss: siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
XX RNA interference.
XX Synthetic.
XX
XX WO2004045543-A2.
XX
XX 03-JUN-2004.
XX
XX 14-NOV-2003; 2003WO-US036787.
XX
XX 14-NOV-2002; 2002US-0426137P.
XX
XX 10-SEP-2003; 2003US-0502050P.
XX
XX (DHAR-) DHARMACON INC.
XX
XX Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
XX WPI; 2004-420527/39.
XX
XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
XX by selecting a target gene and measuring the functionality of the
XX nucleotide sequences that are complementary to a stretch of nucleotides
XX of the target sequence.
XX
XX Example 16; SEQ ID NO 2398; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
XX interfering RNA) comprising selecting an siRNA molecule of 19-25
XX nucleoside bases by selecting a target gene and measuring the
XX functionality of sequences of 19-25 nucleotides in length that are
XX substantially complementary to a stretch of nucleotides of the target
XX sequence, where the functionality is dependent upon non-target specific
XX criteria. Also claimed are methods for gene-silencing, developing an
XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX functionality, selecting hyperfunctional siRNA, an siRNA molecule
XX effective at silencing Bcl-2, and a kit for gene silencing comprising the
XX siRNA. The siRNA molecule comprises a sequence substantially similar to a
XX sequence consisting of GGGAGUAGUGAUGAUGA; GAAGACUCCUCCAGUU;
XX GUACGCAACCGGAGAUU; AGAUGUGAUGAUGAUGA; UGAAGACUCCUCCAGUU;
XX CAUGCGCCUCUGUUGA; UGCGCCUCUGUUGAUGA; GAGAUGAUGAUGAUGA;
XX GGAGAUAGUGAUGAUGA; and GAAGACUCCUCCAGUU. The siRNA molecule
XX comprises a sense strand and an anti-sense strand. The siRNA molecule
XX comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
XX pairs. The kit comprises at least two siRNA, comprising a first optimised
XX siRNA and a second optimised siRNA. The method is useful in selecting
XX siRNA for generating a gene silencing reagent. The present sequence is
XX used in the exemplification of the invention.
XX
XX Sequence 19 BP; 5 A; 1 C; 6 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 50.0%; Pred. No. 1.9e+03;
XX Matches 9; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
XX
XX 4553 GAAACAGCATTTGTTGT 4570
XX |||||:||||:
XX 2 GAGAAAGCAUUGUUUGU 19
XX
XX RESULT 2853
XX AD062668/c
XX ID AD062668 standard; RNA; 19 BP.
XX
XX AC AD062668;
XX
XX 09-SEP-2004 (first entry)
XX
XX
XX

```

```

DE Anti-NNMT siRNA SEQ ID NO:2371.
XX
XX ss: siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
XX RNA interference.
XX Synthetic.
XX
XX WO2004045543-A2.
XX
XX 03-JUN-2004.
XX
XX 14-NOV-2003; 2003WO-US036787.
XX
XX 14-NOV-2002; 2002US-0426137P.
XX
XX 10-SEP-2003; 2003US-0502050P.
XX
XX (DHAR-) DHARMACON INC.
XX
XX Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
XX WPI; 2004-420527/39.
XX
XX Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
XX by selecting a target gene and measuring the functionality of the
XX nucleotide sequences that are complementary to a stretch of nucleotides
XX of the target sequence.
XX
XX Example 12; SEQ ID NO 2371; 199pp; English.
XX
XX The invention relates to a novel method for selecting siRNA (short
XX interfering RNA) comprising selecting an siRNA molecule of 19-25
XX nucleoside bases by selecting a target gene and measuring the
XX functionality of sequences of 19-25 nucleotides in length that are
XX substantially complementary to a stretch of nucleotides of the target
XX sequence, where the functionality is dependent upon non-target specific
XX criteria. Also claimed are methods for gene-silencing, developing an
XX siRNA algorithm for selecting siRNA, selecting an siRNA with improved
XX functionality, selecting hyperfunctional siRNA, an siRNA molecule
XX effective at silencing Bcl-2, and a kit for gene silencing comprising the
XX siRNA. The siRNA molecule comprises a sequence substantially similar to a
XX sequence consisting of GGGAGUAGUGAUGAUGA; GAAGACUCCUCCAGUU;
XX GUACGCAACCGGAGAUU; AGAUGUGAUGAUGAUGA; UGAAGACUCCUCCAGUU;
XX CAUGCGCCUCUGUUGA; UGCGCCUCUGUUGAUGA; GAGAUGAUGAUGAUGA;
XX GGAGAUAGUGAUGAUGA; and GAAGACUCCUCCAGUU. The siRNA molecule
XX comprises a sense strand and an anti-sense strand. The siRNA molecule
XX comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
XX pairs. The kit comprises at least two siRNA, comprising a first optimised
XX siRNA and a second optimised siRNA. The method is useful in selecting
XX siRNA for generating a gene silencing reagent. The present sequence is
XX used in the exemplification of the invention.
XX
XX Sequence 19 BP; 5 A; 3 C; 6 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.8; DB 1; Length 19;
XX Best Local Similarity 88.9%; Pred. No. 1.9e+03;
XX Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 3876 ACTTTCGACACCACTC 3893
XX |||||:|||||
XX 18 ACTTTCGACATCACCCTC 1
XX
XX RESULT 2854
XX AD060741
XX ID AD060741 standard; RNA; 19 BP.
XX
XX AC AD060741;
XX
XX 09-SEP-2004 (first entry)
XX
XX Anti-VEGF siRNA SEQ ID NO:442.
XX
XX ss: siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
XX

```



KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0452894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLTM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 5275; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphate levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphate levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX  
 SQ Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Oy 528 GCCATTCAGACGAG 545  
 ||||| ||||| |||||  
 Db 19 GCCATTCAGACGAG 2  
 RESULT 2857  
 ADR76701/c  
 ID ADR76701 standard; DNA; 19 BP.  
 AC  
 XX ADR76701;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 1186.  
 XX  
 KM antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KM cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KM RNA interference; iRNA; antisense technology; lipid metabolism;  
 KM cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KM coronary artery disease; CAD; coronary heart disease; CHD;  
 KM atherosclerosis; hepatic glucose production;  
 KM glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KM colon cancer; lung cancer; neurological disease; Huntington disease;  
 KM spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004MO-US007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLTM PHARM.  
 PI Manoharan M, Bumcrot D;  
 XX  
 DR WPI; 2004-677362/66.  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1186; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphate levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device

CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.9e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 357 AACGCAAGGTTGAGCTG 374

Db 18 AACTTACCGATTGAGCTG 1

RESULT 2858

ADR79838/C

ADR79838 standard; DNA; 19 BP.

AC ADR79838;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4332.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;

XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;

XX RNA interference; iRNA; antisense technology; lipid metabolism;

XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

XX coronary artery disease; CAD; coronary heart disease; CHD;

XX atherosclerosis; hepatic glucose production;

XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;

XX colon cancer; lung cancer; neurological disease; Huntington disease;

XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

OS WO2004080406-A2.

PN 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-045282P.

XX 12-MAR-2003; 2003US-0454285P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 09-MAY-2003; 2003US-0469612P.

XX 08-AUG-2003; 2003US-0493986P.

XX 11-AUG-2003; 2003US-0494597P.

XX 26-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

XX WPI; 2004-677362/66.

DR

XX

PT interference RNA agent useful for treating dyslipidaemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

PS Example 5; SEQ ID NO 4332; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX sense sequence and an antisense sequence, where the sense sequences have  
 XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX sequences have one or more asymmetrical phosphorothioate modifications  
 XX and the antisense sequence targets a human gene sequence. Also described  
 XX are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX stabilising (I); involves selecting a sequence with activity and  
 XX introducing one or more asymmetrical modification in the sequence, where  
 XX the modification decreases nuclease sensitivity while not decreasing its  
 XX activity, a kit comprising (I) and instruction for its use; and a device  
 XX that can be dispense or administer a composition comprising (I). (I) is  
 XX useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 XX is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 XX The subject is suffering from a disorder characterised by elevated or  
 XX otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX lung cancer), neurological disease (e.g., Huntington disease or  
 XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX can be used to control ApoB gene expression.

SO Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.9e+03;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 528 GCCATTCGAGGAGGAG 545

Db 19 GCCATTACGAGGAGGAG 2

RESULT 2859

ADR79645/C

ADR79645 standard; DNA; 19 BP.

AC ADR79645;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (ApoB) oligonucleotide seqid 4139.

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XX

XX

XX

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

XX Homo sapiens.

XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004MO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 4139; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance, the  
 CC dyslipidemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 QY Best Match 0.1%; Score 14.8; DB 1; Length 19;  
 Db Query Local Similarity 88.9%; Pred. No. 1.9e+01;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

RESULT 2860  
 ID ADR76894/C  
 ID ADR76894 standard; DNA; 19 BP.  
 XX ADR76894;  
 AC  
 XX  
 DT 16-DEC-2004 (first entry)  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1379.  
 XX  
 XX antilipemic; cardiac; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotactic; anticoagulant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004MO-US007070.  
 PF  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 XX  
 DR  
 XX  
 PT Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 1379; 378bp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or

CC Otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance.  
 CC hyperlipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SO Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 528 GCCATTCCAGAGCGAG 545  
 DB 19 GCCATTACAGACGAG 2

RESULT 2861  
 ADR78118/c  
 ID ADR78118 standard; DNA; 19 BP.

XX ADR78118;

DT 16-DEC-2004 (first entry)

DE Human apolipoprotein B (Apob) oligonucleotide seqid 2603.

XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 XX cyostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 XX RNA interference; iRNA; antisense technology; lipid metabolism;  
 XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 XX coronary artery disease; CAD; coronary heart disease; CHD;  
 XX atherosclerosis; hepatic glucose production;  
 XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 XX colon cancer; lung cancer; neurological disease; Huntington disease;  
 XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.

OS Homo sapiens.

PN WO2004080406-A2.

PD 23-SEP-2004.

PF 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-APR-2003; 2003US-0455050P.  
 PR 17-APR-2003; 2003US-0452894P.  
 PR 25-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0465802P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

DR WPI; 2004-677362/66.

XX Interference RNA agent useful for treating dyslipidaemias, coronary artery  
 FT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.

XX Example 5, SEQ ID NO 2603; 378bp; English.

XX The invention describes a RNA interference (RNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.

SO Sequence 19 BP; 2 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+03;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 528 GCCATTCCAGAGCGAG 545  
 DB 19 GCCATTACAGACGAG 2

RESULT 2862

AAQ37987  
 ID AAQ37987 standard; DNA; 17 BP.

XX AAQ37987;

DT 25-MAR-2003 (revised)  
 DT 09-JUL-1993 (first entry)

DE Reverse PCR primer for Tyr Ts gene fragment from B. stearothermophilus.

XX Bacteriophage; Bacillus; PCR; amplification; purine; inosine; 3'-5';  
 KW probe; degenerate; pyrimidine analogue; M13; bacteriophage; ss.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified\_base 5

FT /\*tag= a

FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-

FT C) (1,2)oxazino-7-one"

FT modified\_base 12

FT /\*tag= b

FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-

FT C) (1,2)oxazino-7-one"

```

XX PN WO9305176-A1.
XX PD 18-MAR-1993.
XX PF 11-SEP-1992; 92WO-GB001661.
XX PR 11-SEP-1991; 91GB-00019377.
XX PR 01-NOV-1991; 91GB-00023187.
XX PA (MEDI-) MEDICAL RES COUNCIL.
XX PI Brown DM, Kong Thoo Lin PVS;
XX WPI; 1993-100996/12.
XX DR
XX PT Oligo:nucleotide(s) for use in polymerase chain reaction or as probes -
XX PT contg. degenerate pyrimidine base analogue which recognises adenine or
XX PT guanine.
XX PS Disclosure; Fig 5; 30pp; English.
XX XX The oligomer corresponds to a reverse PCR primer used to amplify a
XX CC fragment of single stranded bacteriophage M13 DNA which contains an
XX CC insert corresp. to the Tyr Ts gene of Bacillus stearothermophilus. The
XX CC M13 DNA was subjected to PCR with Tag DNA polymerase using a number of
XX CC primers. Results showed that a substd. primer could be chain extended by
XX CC Tag polymerase and that primers contg. one of the base analogues 3',4-
XX CC dihydro-8-pyrimido (4,5-C)(1,2)oxazino-7-one (P), N6-methoxy-2,6-diamino-
XX CC purine (K) or inosine (P can base pair with both A and G, K can base pair
XX CC with both C and T and I can base pair with A, T, C or G) were almost as
XX CC effective as the perfectly complementary primer at priming chain
XX CC extension by PCR. See also AAQ37983-8024. (Updated on 25-MAR-2003 to
XX CC correct PN field.)
XX SQ Sequence 17 BP; 6 A; 2 C; 5 G; 2 T; 0 U; 2 Other;

Query Match 0.1%; Score 14.6; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.8e+03;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2741 TGAACGTGGCGCAAAAC 2757
DB 1 TGAATCGGTGCGYAAAC 17

RESULT 2863
AAQ38482
ID AAQ38482 standard; DNA; 17 BP.
XX AC AAQ38482;
XX DT 25-MAR-2003 (revised)
XX DT 09-JUL-1993 (first entry)
XX DE Reverse PCR primer for Tyr Ts gene fragment from B. stearothermophilus.
XX KW Bacteriophage; Bacillus; PCR; amplification; purine; inosine; 3'-5';
XX KM probe; degenerate; pyrimidine analogue; M13; bacteriophage; ss.
XX OS Synthetic.
XX FH Key
XX FH modified_base 5 Location/Qualifiers
XX FT /*tag= a
XX FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-
XX FT C) (1,2)oxazino-7-one related base, M"
XX FT modified_base 12
XX FT /*tag= b
XX FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-
XX FT C) (1,2)oxazino-7-one related base, M"
XX PN WO9305176-A1.

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XX PD 18-MAR-1993.
XX PF 11-SEP-1992; 92WO-GB001662.
XX PR 11-SEP-1991; 91GB-00019378.
XX PR 11-SEP-1991; 91GB-00019378.
XX PA (MEDI-) MEDICAL RES COUNCIL.
XX PI Brown DM, Kong Thoo Lin PVS;
XX WPI; 1993-100997/12.
XX DR
XX PT Oligo:nucleotide(s) for use e.g. as primers in DNA sequencing - contg.
XX PT degenerate purine analogues which recognise cytosine and thymine.
XX PS Disclosure; Fig 8; 41pp; English.
XX XX The oligomer corresponds to a reverse PCR primer used to amplify a
XX CC fragment of single stranded bacteriophage M13 DNA which contains an
XX CC insert corresp. to the Tyr Ts gene of Bacillus stearothermophilus. The
XX CC M13 DNA was subjected to PCR with Tag DNA polymerase using a number of
XX CC primers. Results showed that a substd. primer could be chain extended by
XX CC Tag polymerase and that primers contg. one of the base analogues 3',4-
XX CC dihydro-8-pyrimido (4,5-C)(1,2)oxazino-7-one (P) and related base M, N6-
XX CC methoxy-2,6-diamino-purine (K) or inosine (P can base pair with both A
XX CC and G, K can base pair with both C and T and I can base pair with A, T, C
XX CC or G) were almost as effective as the perfectly complementary primer at
XX CC priming chain extension by PCR. See also AAQ38465-507. (Updated on 25-MAR
XX CC -2003 to correct PN field.)
XX SQ Sequence 17 BP; 6 A; 2 C; 5 G; 2 T; 0 U; 2 Other;

Query Match 0.1%; Score 14.6; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.8e+03;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2741 TGAACGTGGCGCAAAAC 2757
DB 1 TGAATCGGTGCGYAAAC 17

RESULT 2864
AAQ38480
ID AAQ38480 standard; DNA; 17 BP.
XX AC AAQ38480;
XX DT 25-MAR-2003 (revised)
XX DT 09-JUL-1993 (first entry)
XX DE Reverse PCR primer for Tyr Ts gene fragment from B. stearothermophilus.
XX KW Bacteriophage; Bacillus; PCR; amplification; purine; inosine; 3'-5';
XX KM probe; degenerate; pyrimidine analogue; M13; bacteriophage; ss.
XX OS Synthetic.
XX FH Key
XX FH modified_base 5 Location/Qualifiers
XX FT /*tag= a
XX FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-
XX FT C) (1,2)oxazino-7-one"
XX FT modified_base 12
XX FT /*tag= b
XX FT /note= "pyrimidine analogue 3,4-dihydro-8-pyrimido (4,5-
XX FT C) (1,2)oxazino-7-one"
XX PN WO9305176-A1.
XX PD 18-MAR-1993.
XX PF 11-SEP-1992; 92WO-GB001662.

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XX	PR	11-SEP-1991;	91GB-00019378.
XX	PA	(MEDI-) MEDICAL RES COUNCIL.	
XX	PI	Brown DM, Kong Thoo Lin PVS;	
XX	DR	WPI; 1993-100997/12.	
XX	PT	Oligo:nucleotide(s) for use e.g. as primers in DNA sequencing - contg.	
XX	PT	degenerate purine analogues which recognise cytosine and thymine.	
XX	PS	Disclosure; Fig 8; 41pp; English.	
CC	CC	The oligomer corresponds to a reverse PCR primer used to amplify a	
CC	CC	fragment of single stranded bacteriophage M13 DNA which contains an	
CC	CC	insert corresp. to the Tyr T's gene of Bacillus stearothermophilus. The	
CC	CC	M13 DNA was subjected to PCR with Taq DNA polymerase using a number of	
CC	CC	primers. Results showed that a substd. primer could be chain extended by	
CC	CC	Taq polymerase and that primers contg. one of the base analogues 3,4-	
CC	CC	dihydro-8-pyrimido (4,5-C)(1,2)oxazino-7-one (P), N6-methoxy-2,6-diamino-	
CC	CC	purine (K) or inosine (P can base pair with both A and G, K can base pair	
CC	CC	with both C and T and I can base pair with A, T, C or G) were almost as	
CC	CC	effective as the perfectly complementary primer at priming chain	
CC	CC	extension by PCR. See also AAQ38465-507. (Updated on 25-MAR-2003 to	
CC	CC	correct PN field.)	
SQ	SQ	Sequence 17 BP; 6 A; 2 C; 5 G; 2 T; 0 U; 2 Other;	
		Query Match 0.1%; Score 14.6; DB 1; Length 17;	
		Best Local Similarity 82.4%; Pred. No. 1.8e+03;	
		Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;	
QY	2741	TGAACTGGTGCAGAAC 2757	
	:		
DB	1	TGAACGTGGTGAAAAC 17	
RESULT 2865			
ID	ACD13663		
XX	ACD13663 standard; DNA; 16 BP.		
XX	ACD13663;		
XX	AC		
XX	D7	14-AUG-2003 (first entry)	
XX	RIEG screening Family 1 unaffected.		
KW	RIEG: ds; ophthalmological; neoplastic disorder; hyperplastic disorder;		
KW	abnormal cell proliferation; umbilical artery expression; human;		
KX	Rieger's syndrome; vitelline artery expression.		
OS	Homo sapiens.		
PN	US6518411-B1.		
PD	11-FEB-2003.		
PB	22-NOV-1996; 96US-00754477.		
PR	22-NOV-1996; 96US-00754477.		
PA	(UNIP ) UNIV IOWA.		
FI	Murray JC, Semina E;		
DR	WPI; 2003-465605/44.		
PT	New RIEG polypeptides and nucleic acids, useful in antisense therapy, in		
PT	drug screening assays, and in treating Rieger syndrome or associated		
PT	conditions related to umbilical and vitelline artery expression.		
XX	Disclosure; Fig 4B; 101pp; English.		

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XX The invention relates to an isolated RIGS nucleic acid. The nucleic acids
XX are useful as probes to detect transcripts or genomic sequences encoding
XX the same or homologous proteins, in predictive and therapeutic evaluation
XX of allelic mutations which might be manifested in neoplastic or
XX hyperplastic disorders or abnormal cell proliferation, in antisense
XX therapy, in drug screening assays and in the treatment of Reiger's
XX syndrome or associated conditions related to umbilical and vitelline
XX artery expression. The present sequence represents DNA of a family
XX screened for RIGS mutations
XX
XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 16;
XX Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0.
XX
XX 2499 GACCTCAGCTCCTGG 2514
XX |||||||||
XX 1 GGCCCTCCAGCTCCTGG 16
XX
XX RESULT 2866
XX ADB83377
XX ID ADB83377 standard; DNA, 16 BP.
XX
XX AC ADB83377;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE RGS family mutation screening DNA #1.
XX
XX ds; RGS; Solurshin; Reiger syndrome; glaucoma; pituitary disorder;
XX abdominal disorder; umbilical artery expression;
XX vitelline artery expression; human.
XX
XX OS Homo sapiens.
XX
XX PN US2003105002-A1.
XX
XX PD 05-JUN-2003.
XX
XX PE 22-MAR-2002; 2002US-00105004.
XX
XX PR 22-NOV-1996; 96US-00754477.
XX
XX PA (MURRAY J C.
XX PA (SEMI//) SEMINA E.
XX
XX PI Murray JC, Semina E;
XX
XX WPI; 2003-678200/64.
XX
XX New nucleic acid molecule encoding an RGS polypeptide, useful for
XX suppressing the development of Reiger syndrome, which can lead to
XX glaucoma and for treating associated conditions related to umbilical and
XX vitelline artery expression.
XX
XX Disclosure; Fig 4A; 104pp; English.
XX
XX The invention relates to an isolated nucleic acid molecule encoding
XX RGS/Solurshin. The nucleic acid molecule, polypeptides and methods are
XX useful for suppressing the development of Reiger syndrome, which can lead
XX to glaucoma, and for treating associated conditions including pituitary
XX and abdominal disorders related to umbilical and vitelline artery
XX expression. The present sequence represents the RGS family mutational
XX screening DNA.
XX
XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 16;
XX Best Local Similarity 93.8%; Pred. NO. 1.8e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 2499 GACCTCAGCTCCTGG 2514  
 DB 1 GGCCTCAGCTCCTGG 16

RESULT 2867  
 AAQ26445  
 ID AAQ26445 standard; DNA; 17 BP.  
 XX  
 AC AAQ26445;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 08-JAN-1993 (first entry)  
 XX  
 DE Probe DB53.  
 XX  
 KW PCR; polymerase chain reaction; amplify; class II HLA DQB1 probe;  
 KW Insulin-dependent diabetes mellitus; IDDM; forensics; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9211389-A1.  
 XX  
 PD 09-JUL-1992.  
 XX  
 PF 20-DEC-1991; 91WO-US009796.  
 XX  
 PR 21-DEC-1990; 90US-00632180.  
 XX  
 XX (HOFF) HOFFMANN LA ROCHE & CO AG F.  
 XX  
 PA Erlich HA, Bugawan T;  
 PI WPI; 1992-250108/30.  
 DR  
 XX  
 PT Novel method for typing HLA DQB1 alleles - for tissue typing, determining  
 PT identity, and for studying disease susceptibility.  
 XX  
 PS Disclosure; Page 12; 37pp; English.

CC The sequences given in AAQ26442-57 are probes which were used within the  
 CC scope of the invention to type class II HLA DQB1 alleles. These probes  
 CC were used to screen sequences amplified from the DQB1 gene second exon  
 CC sequence. This method could be used to identify new DQB1 alleles. This  
 CC method provides a simple, rapid and precise system for DQB1 typing,  
 CC including those alleles which cannot be distinguished by serological  
 CC methods. The presence or absence of a particular HLA DQB1 allele serves  
 CC as an indicator of susceptibility to insulin-dependent diabetes mellitus  
 CC (IDDM). Accurate DQ typing is particularly important in the field of  
 CC organ transplantation and in the study of the molecular basis of disease  
 CC susceptibility. Moreover, samples from unusual sources, eg. ancient DNA  
 CC or forensic samples, can be typed, even when the DNA sample is degraded  
 CC or only present in a small amount. (Updated on 25-MAR-2003 to correct PN  
 CC field.)  
 XX

SQ Sequence 17 BP; 0 A; 6 C; 7 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 160 TGCTGGGGCTGGCCCTGC 175  
 DB 1 TGCTGGGGCTGGCCCTGC 16

RESULT 2868  
 AAX63985  
 ID AAX63985 standard; RNA; 17 BP.  
 XX  
 AC AAX63985;  
 XX

DT 20-JUL-1999 (first entry)  
 XX  
 DE Rabbit streptomycin hammerhead target SEQ ID NO:617.  
 XX  
 KW Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KW Hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KW streptomycin; synovial membrane; joint; arthritis; osteoarthritis;  
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KW diagnosis; ss.  
 XX  
 OS Oryctolagus cuniculus.  
 XX  
 PN WO9618736-A2.  
 XX  
 PD 20-JUN-1996.  
 XX  
 PF 22-NOV-1995; 95WO-US015516.  
 XX  
 PR 13-DEC-1994; 94US-00354920.  
 PR 23-DEC-1994; 94US-00363253.  
 PR 23-DEC-1994; 94US-00363254.  
 PR 17-FEB-1995; 95US-00390850.  
 PR 20-APR-1995; 95US-00426124.  
 PR 02-MAY-1995; 95US-00432874.  
 PR 04-MAY-1995; 95US-00434509.  
 PR 07-JUL-1995; 95US-0000951P.  
 PR 07-JUL-1995; 95US-0000974P.  
 PR 07-AUG-1995; 95US-00512861.  
 PR 05-OCT-1995; 95US-00541365.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PA Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Payco P;  
 PI Meswigen J, Gustofson J, Usman N, Wincote F, Matulic-Adamic J;  
 PI Karpelsky A, Thompson UD, Modak A, Burgin A;  
 XX  
 DR WPI; 1996-300653/30.  
 XX  
 PT Enzymatic nucleic acid molecules having a hammer-head motif - used for  
 PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.  
 XX  
 PS Example 1; Page 155; 307pp; English.

CC The present invention describes a novel enzymatic nucleic acid (ENA)  
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and streptomycin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis,  
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an allogeneic or of a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC streptomycin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 XX

SQ Sequence 17 BP; 7 A; 3 C; 4 G; 0 T; 3 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 1.9e+03;  
 Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 1106 GAAGACTCTCCAGGAA 1121  
 DB 2 GAAGACUUCACAGAA 17

RESULT 2869  
 AAX63986  
 ID AAX63986 standard; RNA; 17 BP.  
 XX  
 AC AAX63986;  
 XX  
 DT 20-JUL-1999 (first entry)  
 XX  
 DE Rabbit stromelysin hammerhead target SEQ ID NO:618.  
 XX  
 KM Arthritic condition; graft tolerance; immune response; target; cleavage;  
 KM hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;  
 KM stromelysin; synovial membrane; joint; arthritis; osteoarthritis;  
 KM rheumatoid arthritis; autoimmune disease; allergy; inflammation;  
 KM diagnosis; ss.  
 XX  
 OS Oryctolagus cuniculus.  
 XX  
 PN MO9618736-A2.  
 PD  
 XX 20-JUN-1996.  
 XX  
 PF 22-NOV-1995; 95MO-US015516.  
 XX  
 PR 13-DEC-1994; 94US-00354920.  
 PR 23-DEC-1994; 94US-00363253.  
 PR 23-DEC-1994; 94US-00363254.  
 PR 17-FEB-1995; 95US-00390850.  
 PR 20-APR-1995; 95US-00426124.  
 PR 02-MAY-1995; 95US-00432874.  
 PR 04-MAY-1995; 95US-00434509.  
 PR 07-JUL-1995; 95US-0000951P.  
 PR 07-AUG-1995; 95US-0000974P.  
 PR 05-OCT-1995; 95US-00512861.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;  
 PI McWiggen J, Gustofson J, Uman N, Wincott F, Matulic-Adamic J;  
 PI Karpetsky A, Thompson JD, Modak A, Burgin A;  
 XX  
 DR WPI; 1996-300653/30.  
 XX  
 PT Enzymatic nucleic acid molecules having a hammer-head motif - used for  
 PT the treatment of arthritis, induction of graft tolerance or treatment of  
 PT auto-immune diseases.  
 XX  
 PS Example 1; Page 155; 307pp; English.  
 XX  
 CC The present invention describes a novel enzymatic nucleic acid (ENA)  
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues  
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least  
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's  
 CC can inhibit collagenase and stromelysin production in the synovial  
 CC membrane of joints for the treatment or prevention of arthritis,  
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also  
 CC be used to treat antigen presenting cells of a donor to induce tolerance  
 CC in a recipient to an alloantigen of a donor. They can also be used for  
 CC enhancing graft tolerance or for treating autoimmune disease, and for  
 CC treating allergies and other inflammatory conditions. The ENA's can also  
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of  
 CC stromelysin without introducing the non-specific effects upon gene  
 CC expression which accompany treatment with retinoids and dexamethasone.  
 CC The concentration of ribozyme required to affect a therapeutic treatment  
 CC is lower than that required of antisense molecules, and is highly  
 CC specific. The present sequence is used in the exemplification of the  
 CC present invention  
 XX  
 SQ Sequence 17 BP; 6 A; 3 C; 4 G; 0 T; 4 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 1.9e+03;  
 Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1106 GAAGACTCTCCAGGAA 1121  
 Db 1 GAAGACTCTCCAGGAA 16  
 RESULT 2870  
 AAT38743/C  
 ID AAT38743 standard; DNA; 17 BP.  
 XX  
 AC AAT38743;  
 XX  
 DT 16-OCT-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 16-JUL-1997 (first entry)  
 XX  
 DE 3' Junction fragment between mMAP and PACE DNA.  
 XX  
 KM mMAP: mouse whey acidic protein; PACE; pig; sheep; goat;  
 KM paired basic amino acid cleaving enzyme; transgenic; non-human; mouse;  
 KM dairy product; transgenic bioreactor; dairy milk; ss.  
 XX  
 OS Mus musculus.  
 OS Homo sapiens.  
 OS Chimeric.  
 XX  
 FH Key  
 FT promoter  
 FT 1..8  
 FT /tag= a  
 FT /organism= "Homo sapiens"  
 FT /note= "3' fragment of PACE cDNA"  
 FT 9..10  
 FT /tag= b  
 FT /note= "Linker"  
 FT 11..17  
 FT /tag= c  
 FT /organism= "Mus musculus"  
 FT /note= "Represents 5' end of mMAP gene"  
 FT misc\_feature  
 FT misc\_feature  
 PN MO9634966-A2.  
 PD  
 XX 07-NOV-1996.  
 XX  
 PF 06-MAY-1996; 96MO-US006121.  
 XX  
 PR 04-MAY-1995; 95US-00434834.  
 XX  
 PA (AMNA-) AMERICAN NAT RED CROSS.  
 PI Lubon H, Drohan WN, Paleyanda RK;  
 PI WPI; 1996-506168/50.  
 DR  
 XX  
 PT Transgenic organism encoding 1st and 2nd proteins - where 2nd protein  
 PT affects post translational modification of 1st protein, useful for  
 PT expressing proteins in milk, saliva, etc.  
 XX  
 PS Example 1; Page 14; 59pp; English.  
 XX  
 CC The sequences given in AAT38742-43 represent the 5' and 3' junctions  
 CC between mMAP (mouse whey acidic protein) and PACE (paired basic amino  
 CC acid cleaving enzyme) in an mMAP/PACE construct. The construct was used  
 CC in the production of a transgenic non-human multicellular organism, e.g.  
 CC a mouse, which comprises cells incorporating 1st and 2nd polynucleotides  
 CC (PN) encoding 1st and 2nd proteins, where the expression of the 1st  
 CC protein affects the post-translational modification of the 1st protein in  
 CC the cells. The mouse may be used to obtain a post translationally  
 CC modified protein. It can be used to produce dairy prodn., with altered  
 CC compans. and properties. The PN can be used to enhance the prodn. of  
 CC substances in transgenic bioreactors, and to increase the usefulness of  
 CC prodn. produced by transgenic organisms, e.g. dairy milk, and milk-prods.

CC made by pigs, sheep and goats. (Updated on 25-MAR-2003 to correct PR  
 CC field.) (Updated on 16-OCT-2003 to standardise OS field)  
 XX  
 SO Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2550 GGGATCCCCCAGATGA 2565  
 DB 17 GGGATCCCCCAGATGA 2

RESULT 2871  
 AAX74887  
 ID AAX74887 standard; RNA; 17 BP.  
 XX  
 AC AAX74887;  
 XX  
 DT 28-JUL-1999 (first entry)  
 XX  
 DE Mouse flt-1 VEGF receptor hammethead ribozyme substrate #415.  
 XX  
 KM Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KM KDR; hammethead ribozyme; hairpin ribozyme; cleavage;  
 KM tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KM fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KM foetal liver kinase 1; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN W09715662-A2.  
 PD 01-MAY-1997.  
 XX  
 PF 25-OCT-1996; 96MO-US017480.  
 XX  
 PR 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR) CHIRON CORP.  
 XX  
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
 XX  
 DR WPI; 1997-259017/23.  
 XX  
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 XX  
 PS Claim 4; Page 167; 218pp; English.  
 XX  
 CC The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 CC  
 XX  
 SO Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 62.5%; Pred. No. 1.9e+03;  
 Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 4320 GACCTGCTTCTACA 4335  
 |||||:|:::|:|

DB 1 GACCTGATUUCUACA 16

RESULT 2872  
 AAX73024  
 ID AAX73024 standard; RNA; 17 BP.  
 XX  
 AC AAX73024;  
 XX  
 DT 28-JUL-1999 (first entry)  
 XX  
 DE Mouse flk-1 VEGF receptor hammethead ribozyme substrate #457.  
 XX  
 KM Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KM KDR; hammethead ribozyme; hairpin ribozyme; cleavage;  
 KM tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KM fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KM foetal liver kinase 1; ss.  
 XX  
 OS Mus sp.  
 XX  
 PN W09715662-A2.  
 PD 01-MAY-1997.  
 XX  
 PF 25-OCT-1996; 96MO-US017480.  
 XX  
 PR 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR) CHIRON CORP.  
 XX  
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
 XX  
 DR WPI; 1997-259017/23.  
 XX  
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 XX  
 PS Claim 4; Page 137; 218pp; English.  
 XX  
 CC The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 CC  
 XX  
 SO Sequence 17 BP; 3 A; 5 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 56.2%; Pred. No. 1.9e+03;  
 Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 3582 TCATCTGCTACAGCTT 3597  
 DB 1 UCACUCGUDACAGCUU 16

RESULT 2873  
 AAX71450  
 ID AAX71450 standard; RNA; 17 BP.  
 XX  
 AC AAX71450;  
 XX  
 DT 28-JUL-1999 (first entry)

DE Human KDR VEGF receptor hammethead ribozyme substrate #462.  
 XX  
 XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW KDR; hammethead ribozyme; hairpin ribozyme; cleavage;  
 KW tumor angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW foetal liver kinase 1; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX MO9715662-A2.  
 XX  
 XX 01-MAY-1997.  
 XX  
 XX 25-OCT-1996; 96WO-US017480.  
 XX  
 XX 26-OCT-1995; 95US-0005974P.  
 PR 11-JAN-1996; 96US-00584040.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (CHIR ) CHIRON CORP.  
 XX  
 XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
 PI WPI; 1997-259017/23.  
 XX  
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.  
 PS  
 XX Claim 4; Page 111; 218pp; English.  
 XX  
 XX The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 CC  
 SQ Sequence 17 BP; 3 A; 5 C; 2 G; 0 T; 7 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 56.2%; Pred.No. 1.9e+03;  
 Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;  
 QY 3582 TCATCTGCTACAGCTT 3597  
 Db 1 UCACUCGUCACGCUU 16  
 XX  
 XX RESULT 2874  
 XX AAV97508  
 ID AAV97508 standard; RNA; 17 BP.  
 XX  
 XX AAV97508;  
 XX  
 XX 17-MAR-1999 (first entry)  
 XX  
 XX Human EGF-R target sequence nucleotide position 2532.  
 DE  
 XX  
 KW Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
 KW hammethead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
 KW cancer; genetic drift; detection; mutation; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX MO9833893-A2.  
 PN  
 XX 06-AUG-1998.  
 PD

XX  
 XX 14-JAN-1998; 98WO-US000730.  
 PF  
 XX 31-JAN-1997; 97US-0036476P.  
 PR 04-DEC-1997; 97US-00985162.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (UYAS-) UNIV ASTON.  
 XX  
 XX Akhtar S, Fell P, Mcswiggen UA;  
 PI WPI; 1998-437449/37.  
 XX  
 XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
 PT growth factor receptor, useful for inhibiting cell proliferation and for  
 PT treating cancers.  
 PS  
 XX Claim 5; Page 74; 109pp; English.  
 XX  
 XX The present invention describes enzymatic nucleic acid molecules (NMs)  
 CC which specifically cleave RNA derived from an epidermal growth factor  
 CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
 CC represent specifically claimed target sequence from human EGF-R. AAV98044  
 CC to AAV98866 and AAV98867 to V9878 represent hammethead ribozymes and  
 CC hairpin ribozymes respectively for human EGF-R. The NMs are useful for  
 CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
 CC expression levels e.g. to inhibit cell proliferation in the prevention or  
 CC treatment of cancers. The NMs can also be used as diagnostic tools to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of EGF-R RNA in a cell  
 CC  
 SQ Sequence 17 BP; 3 A; 9 C; 1 G; 0 T; 4 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 68.8%; Pred.No. 1.9e+03;  
 Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;  
 QY 4753 TCCTCCTCACCTGCAC 4768  
 Db 2 UCGUCUCACCTCCAC 17  
 XX  
 XX RESULT 2875  
 XX AAA18879/c  
 ID AAA18879 standard; RNA; 17 BP.  
 XX  
 XX AAA18879;  
 XX  
 XX 19-JUN-2000 (first entry)  
 XX  
 XX Human TIE-2 substrate sequence SEQ ID NO:2105.  
 DE  
 XX  
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammethead ribozyme; angiogenic factor; cytoskeletal; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiodiroma;  
 KW tuberosus sclerososis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 XX Homo sapiens.  
 XX  
 XX MO9950403-A2.  
 PN  
 XX 07-OCT-1999.  
 PD  
 XX 24-MAR-1999; 99WO-US006507.  
 PF  
 XX 27-MAR-1998; 98US-0079678P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA

XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswigen JA;  
 XX MPI, 1999-591315/50.  
 DR  
 XX  
 PT Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 XX  
 PS Claim 56; Page 122; 305pp; English.  
 CC The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 CC  
 SQ Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3342 GACCTCGAACAATCC 3357  
 Db 17 GACCTCGGACATCC 2  
 RESULT 2876  
 AAA22603/c  
 ID AAA22603 standard; RNA; 17 BP.  
 XX  
 AC AAA22603;  
 XX  
 DT 19-JUN-2000 (first entry)  
 XX  
 DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5829.  
 XX  
 XX Human; aryl hydrocarbon nuclear transporter; ARNT; Tie-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antiporiatic; ARMD;  
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO950403-A2.  
 XX  
 PD 07-OCT-1999.  
 XX

PF 24-MAR-1999; 99WO-US006507.  
 XX  
 PR 27-MAR-1998; 98US-0079678P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswigen JA;  
 XX MPI, 1999-591315/50.  
 DR  
 XX  
 PT Novel ribozymes for modulating the synthesis, expression and/or stability  
 PT of an mRNA encoding an angiogenic factors.  
 XX  
 PS Claim 54; Page 231; 305pp; English.  
 CC The present invention describes enzymatic nucleic acid molecules with RNA  
 CC cleaving activity, which specifically cleave RNA encoded by an aryl  
 CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
 CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
 CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
 CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
 CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to  
 CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
 CC and AAA19155 to AAA19222 represent their corresponding target sequences;  
 CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
 CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
 CC AAA21596 to AAA21688 represent their corresponding target sequences;  
 CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence  
 CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to  
 CC AAA23422 represent their corresponding target sequences. The ribozymes of  
 CC the invention are used for modulating the synthesis, expression and/or  
 CC stability of an mRNA encoding angiogenic factor, especially ARNT,  
 CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
 CC especially used to treat cancer, diabetic retinopathy, age related  
 CC macular degeneration (ARMD), inflammation, and arthritis, as well as  
 CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber  
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
 CC integrin subunit alpha-6, or integrin subunit beta-3  
 CC  
 SQ Sequence 17 BP; 0 A; 4 C; 0 G; 0 T; 13 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 3470 AAAGAGAGAGAGAAA 3485  
 Db 16 AAAGAGAGAGAGAAA 1  
 RESULT 2877  
 AAA22601/c  
 ID AAA22601 standard; RNA; 17 BP.  
 XX  
 AC AAA22601;  
 XX  
 DT 19-JUN-2000 (first entry)  
 XX  
 DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5827.  
 XX  
 XX Human; aryl hydrocarbon nuclear transporter; ARNT; Tie-2; angiogenesis;  
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
 KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;  
 KW ophthalmologic; antiinflammatory; antiarthritic; antiporiatic; ARMD;  
 KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
 KW age related macular degeneration; inflammation; neovascular glaucoma;  
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
 KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;  
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
 XX  
 OS Homo sapiens.  
 XX

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XX PN WO9950403-A2.
XX PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcwiggan JA;
XX DR WPI; 1999-591315/50.
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX PT of an mRNA encoding an angiogenic factors.
XX PS Claim 54; Page 230; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
XX CC cleaving activity, which specifically cleave RNA encoded by an aryl
XX CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX CC and AAA19155 to AAA19222 represent their corresponding target sequences;
XX CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX CC AAA21596 to AAA22475 and AAA22623 to AAA23342 represent ribozyme sequences
XX CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX CC AAA23422 represent their corresponding target sequences. The ribozymes of
XX CC the invention are used for modulating the synthesis, expression and/or
XX CC stability of an mRNA encoding angiogenic factor, especially ARNT,
XX CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX CC especially used to treat cancer, diabetic retinopathy, age related
XX CC macular degeneration (ARMD), inflammation, and arthritis, as well as
XX CC neovascular glaucoma, myopic degeneration, psoriasis, vertica vulgaris,
XX CC angiodioma of tuberous sclerosis, poc-wine stains, Sturge Weber
XX CC syndrome, Kippel-Trenauay-Weber syndrome, Oster-Weber-Rendu syndrome,
XX CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX CC integrin subunit alpha-6, or integrin subunit beta-3.
XX SQ Sequence 17 BP; 0 A; 3 C; 0 G; 0 T; 14 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 93.8%; Pred. No. 1.9e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3471 AAGGAGAAAGAAAA 3486
XX Db 17 AAGGAGAAAGAAAA 2
XX
XX RESULT 2878
XX AAA36130
XX ID AAA36130 standard; DNA; 17 BP.
XX AC AAA36130;
XX XX
XX DT 26-JUL-2000 (first entry)
XX DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:187.
XX XX
XX KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
XX KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
XX KW genomic classification; identification; DNA fingerprinting;
XX KW tumour characterisation; hybridisation; ss.
XX OS Homo sapiens.
XX XX

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XX PN WO200018960-A2.
XX PD 06-APR-2000.
XX PF 24-SEP-1999; 99WO-US022283.
XX PR 25-SEP-1998; 98US-0101757P.
XX PA (MAST ) MASSACHUSETTS INST TECHNOLOGY.
XX PI Landers JE, Jordan B, Houseman DE, Charest A;
XX DR WPI; 2000-293181/25.
XX PT Detection of single nucleotide polymorphisms in genomes by preparation
XX PT and analysis of reduced complexity genomes, useful for genotyping,
XX PT fingerprinting and determining allele frequency of SNPs.
XX PS Disclosure; Page 59; 11pp; English.
XX CC A method has been developed for detecting the presence or absence of a
XX CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
XX CC method comprises preparing a reduced complexity genome (RCG) from the
XX CC genomic sample and analysing the RCG for the presence or absence of a SNP
XX CC allele. The method can be used to characterise a tumour, to generate a
XX CC genomic pattern for an individual genome or to generate a genomic
XX CC classification code for a genome. The method can be used to assess
XX CC whether a subject is at risk for developing a disease or to identify a
XX CC set of SNP alleles associated with a disease. The method can also be used
XX CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
XX CC used in the simplification of the present invention. AAA35948 to
XX CC AAA3632 represent nucleotide sequences containing SNPs
XX SQ Sequence 17 BP; 1 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 17;
XX Best Local Similarity 93.8%; Pred. No. 1.9e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1244 GGGTCCAGCCGCCATC 1259
XX Db 2 GGTGTCTGCCCCATC 17
XX
XX RESULT 2879
XX ABR03776
XX ID ABR03776 standard; RNA; 17 BP.
XX AC ABR03776;
XX XX
XX DT 12-MAR-2002 (first entry)
XX DE Human CD20 Ambezyme #125.
XX XX
XX KW Human; ss; antisense therapy; cytosolic; antiinflammatory; haemostatic;
XX KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
XX KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
XX KW DNzyme; inozyme; G-cleaver; ambezyme; zinzyme; lymphoma; leukaemia;
XX KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
XX KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
XX KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;
XX KW inflammatory arthropathy; central nervous system injury;
XX KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
XX KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
XX KW Parkinson's disease; ataxia; Huntington's disease;
XX KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200159103-A2.
XX XX

```

PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001MO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOM/) CHOMRIRA B M.  
 PI Blact L, Mcswigen J, Chowrira BM;  
 XX WPI, 2001-607195/69.  
 DR  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 PS Claim 30; Page 169; 200Pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably  $Mg^{2+}$ .  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory atrophy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 XX  
 SQ Sequence 17 BP; 8 A; 2 C; 4 G; 0 T; 3 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 1.9e+03;  
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
 QY 1534 ACCTGATGGAACGAT 1549  
 DB 1 ACCUGAUGGAAAAAGAU 16  
 RESULT 2880  
 ABK03775  
 ID ABK03775 standard; RNA; 17 BP.  
 XX  
 AC ABK03775;

DT 12-MAR-2002 (first entry)  
 XX  
 DE Human CD20 Amberzyme #124.  
 XX  
 KW Human; ss; antisense therapy; cyostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; Inozyme; G-cleaver; amberzyme; zynzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory atrophy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN MO200159103-A2.  
 XX  
 PD 16-AUG-2001.  
 XX  
 PF 09-FEB-2001; 2001MO-US004273.  
 XX  
 PR 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOM/) CHOMRIRA B M.  
 PI Blact L, Mcswigen J, Chowrira BM;  
 XX WPI, 2001-607195/69.  
 DR  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 PS Claim 30; Page 169; 200Pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably  $Mg^{2+}$ .  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory atrophy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably  $Mg^{2+}$ . Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),



CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an amberzyme molecule of the invention  
 CC  
 SQ Sequence 17 BP; 7 A; 3 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 1.9e+03;  
 Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1534 ACCGTATGGAACAGAT 1549  
 |||||  
 Db 2 ACCUGAUGGAAAGAU 17

RESULT 2881  
 ID ABA77561/C  
 AB77561 standard; DNA; 17 BP.

AC ABA77561;  
 DT 24-JAN-2002 (first entry)

DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 407.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presentin-1;  
 KW Alzheimer's disease; cyostatic; antisticking; antinaemic; haemostatic;  
 KW antileptic; ss.

XX Homo sapiens.

OS WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192176P.

PR 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

PI WPI; 2001-639230/73.

DR Oligonucleotide for targeted alterations of genetic sequences and for  
 PT treating cystic fibrosis, comprises at least one mismatch and chemical  
 PT modification.

XX Claim 7; Page 68; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can  
 CC be used for the targeted alteration of genomic sequences, where the  
 CC oligonucleotide has at least one mismatch compared with the genomic  
 CC sequence to be altered. In particular, these sequences are directed at  
 CC the following genes: adenosine deaminase, p53, beta-globin,  
 CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A  
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
 CC (UGT1), amyloid precursor protein (APP), presentin-1 (PSEN1) and  
 CC presentin-2 (PSEN2). These can be used in the gene therapy of diseases

CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
 CC haemophilia, hypercholesterolaemia, thalassemia, sickle cell anaemia,  
 CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
 CC various syndromes. The present sequence is one of the gene correcting  
 CC oligonucleotides of the invention  
 CC  
 SQ Sequence 17 BP; 4 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2835 ACCACTTCTTCACG 2850  
 |||||  
 Db 17 ACCACTTCATCCACG 2

RESULT 2882  
 ID ABA77562  
 AB77562 standard; DNA; 17 BP.

AC ABA77562;

DT 24-JAN-2002 (first entry)

DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 408.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
 KW retinoblastoma; BRCA1; BRCA2; CTR; cystic fibrosis; cancer; Factor V;  
 KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
 KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
 KW haemophilia; alpha thalassemia; haemoglobin alpha locus 1; MLH1; APOE;  
 KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
 KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
 KW UDP-glucuronosyltransferase; amyloid precursor protein; presentin-1;  
 KW Alzheimer's disease; cyostatic; antisticking; antinaemic; haemostatic;  
 KW antileptic; ss.

XX Homo sapiens.

OS WO200173002-A2.

PN 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192176P.

PR 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE ) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

PI WPI; 2001-639230/73.

DR Oligonucleotide for targeted alterations of genetic sequences and for  
 PT treating cystic fibrosis, comprises at least one mismatch and chemical  
 PT modification.

XX Claim 7; Page 68; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can  
 CC be used for the targeted alteration of genomic sequences, where the  
 CC oligonucleotide has at least one mismatch compared with the genomic  
 CC sequence to be altered. In particular, these sequences are directed at  
 CC the following genes: adenosine deaminase, p53, beta-globin,  
 CC retinoblastoma, BRCA1, BRCA2, CTR, cyclin-dependent kinase inhibitor 2A  
 CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
 CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
 CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
 CC (UGT1), amyloid precursor protein (APP), presentin-1 (PSEN1) and

CC presentin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolaemia, thalassemia, sickle cell anemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX

Sequence 17 BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2835 ACCAACTTCTCCAGC 2850  
1 ACCAACTTCTCCAGC 16

RESULT 2883  
ABL46891/c  
ID ABL46891 standard; RNA; 17 BP.  
XX  
AC ABL46891;  
XX  
DT 27-JUN-2003 (first entry)  
XX  
DE Human GRD G-cleaver ribozyme substrate oligonucleotide #32.

XX Human; Grb2-related with Insert Domain; GRD; T-cell;  
XX co-stimulatory adaptor protein; tissue rejection; graft rejection;  
XX leukaemia; cytostatic; ss.

OS Homo sapiens.  
XX  
PN WO200162911-A2.  
XX  
PD 30-AUG-2001.  
XX  
PF 23-FEB-2001; 2001WO-US005957.  
XX  
PR 24-FEB-2000; 2000US-0184594P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX) GLAXO GROUP LTD.

PI Jarvis T, Von Carlowitz I, Mosewigen JA, Hamblin PA, Ellis JH;  
XX  
DR WPI; 2001-550088/61.

XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRD) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.

Claim 4; Page 69; 108pp; English.

XX The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRD) gene. GRD is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRD, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX

Sequence 17 BP; 4 A; 7 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 191  
16 GCTGCTGCTGCTGCTG 1

RESULT 2884

ABN01833  
ID ABN01833 standard; DNA; 17 BP.

XX  
AC ABN01833;  
XX

DT 29-MAY-2002 (first entry)

DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1825.

XX Human; genome-derived myosin-like protein 1; GDMPLP-1; heart;  
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
XX skeletal muscle disorder; amplicon; screening; ss.

OS Homo sapiens.  
XX  
PN WO200192524-A2.  
XX  
PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
XX 21-SEP-2000; 2000US-0234687P.  
XX 27-SEP-2000; 2000US-0236359P.  
XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.  
XX 30-JAN-2001; 2001WO-US000662.  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 30-JAN-2001; 2001WO-US000670.  
XX 05-FEB-2001; 2001US-0266860P.

PA (AEON-) AEONICA INC.

PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
XX  
DR WPI; 2002-179446/23.

XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
PT or as specific biomolecule capture probes for surface-enhanced laser  
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
XX  
XX disclosure; SEQ ID NO 1825; 214pp; English.

XX The present invention describes a human genome-derived myosin-like  
CC protein 1 (hGDMPLP-1). The protein and vaccine production. The hGDMPLP-1  
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
CC nucleic acids can be used as probes to detect, characterize and quantify  
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
CC protein variants having desired phenotypic improvements, and for  
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP-  
CC 1-proteins, as standards in assays used to determine the concentration  
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
CC capture probes for surface-enhanced laser desorption/ionisation, as  
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
CC production, and in vaccines or for replacement therapy. The  
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
CC disorder associated with the expression of hGDMPLP-1, in particular heart  
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
CC The present sequence represents an oligomer used in the screening of the  
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
CC The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX Sequence 17 BP; 8 A; 5 C; 2 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1677 ACAAGCCATCACTGA 1692  
 |||||  
 2 ACAAAACCATCACTGA 17  
 Db  
 RESULT 2885  
 ABNO1834  
 ID ABNO1834 standard; DNA; 17 BP.  
 AC ABNO1834;  
 XX  
 DT 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1826.  
 XX  
 KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 MO200192534-A2.  
 PN  
 PD 06-DEC-2001.  
 XX  
 PF 25-MAY-2001; 2001WO-US016981.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 PA (AEOM-) AEOMICA INC.  
 XX  
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX  
 DR WPI; 2002-179446/23.  
 XX  
 PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMLP-1.  
 XX  
 PS Disclosure; SEQ ID NO 1826; 214pp; English.  
 XX  
 XX The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMLP  
 CC -1 proteins, as standards in assays used to determine the concentration

CC and/or amount specifically of hGDMLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 SQ Sequence 17 BP; 8 A; 5 C; 2 G; 2 T; 0 U; 0 Other;  
 CC  
 CC Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 CC Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 CC Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Oy 1677 ACAAGCCATCACTGA 1692  
 |||||  
 1 ACAAAACCATCACTGA 16  
 Db  
 RESULT 2886  
 ABK57506/c  
 ID ABK57506 standard; RNA; 17 BP.  
 AC ABK57506;  
 XX  
 DT 02-JUL-2002 (first entry)  
 XX  
 DE Human CLCA1 gene enzymatic nucleic acid #1877.  
 XX  
 KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
 KW acetylcytosteine.  
 XX  
 OS Homo sapiens.  
 XX  
 PN MO200211674-A2.  
 PD 14-FEB-2002.  
 XX  
 PF 09-AUG-2001; 2001WO-US024970.  
 XX  
 PR 09-AUG-2000; 2000US-0224383P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (SYNT ) SYNTX USA LLC.  
 PA (THOM/) THOMPSON J.  
 XX  
 PI Thompson J, Mcswigen J, McKenzie T, Ayers D, Szymkowski DE;  
 PI Grupe A;  
 XX  
 DR WPI; 2002-217145/27.  
 XX  
 PT Enzymatic polynucleotide that down regulates expression of chloride  
 PT channel calcium activated gene, useful for treating Chronic obstructive  
 PT pulmonary disease (COPD), chronic bronchitis and asthma.  
 XX  
 PS Claim 4; Page 127; 152pp; English.  
 XX  
 XX The invention relates to enzymatic nucleic acid molecules that down  
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
 CC useful as pharmaceutical agents for treating conditions such as chronic  
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
 CC that are related to or will respond to the levels of CLCA1 in a cell or  
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,

CC hence, are useful for treatment of a patient having a condition  
 CC associated with the level of C/CAI, where the invention further comprises  
 CC the use of one or more therapies under conditions suitable for the  
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
 CC nucleic acids of the invention are also used as diagnostic tools to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of C/CAI RNA in a cell. This sequence represents an  
 CC enzymatic nucleic acid molecule of the invention

XX  
 SQ Sequence 17 BP; 5 A; 1 C; 7 G; 0 T; 4 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.9e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 1;

Qy 918 CAACACCTCTTCCTGC 933  
 17 CAACACCTCTTCATGC 2

RESULT 2887  
 ACN01033

ID ACN01033 standard; RNA; 17 BP.

XX ACN01033;

XX 22-APR-2004 (first entry)

DE MNV Hammerhead Ribozyme substrate SEQ ID NO 1023.

XX MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KM virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KM encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KM liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KM Amberzyme; Zinzyme; ss.

XX West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (MNV), useful for treating a condition related to MNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 1023; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (MNV). The nucleic acid molecules are useful for  
 CC treating a condition related to MNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given

CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention

XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

XX Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 81.2%; Pred. No. 1.9e+03; Indels 0; Gaps 0;

Matches 13; Conservative 2; Mismatches 1;

Qy 2460 CGCATCTTGGGAGAGG 2475  
 2 CGCACCUGGAGAGG 17

RESULT 2888  
 ACN010371/C  
 ID ACN010371 standard; RNA; 17 BP.

XX ACN010371;

XX 22-APR-2004 (first entry)

DE MNV minus strand Inozyme substrate SEQ ID NO 10374.

XX MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KM virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KM encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KM liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KM Amberzyme; Zinzyme; ss.

XX West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (MNV), useful for treating a condition related to MNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 10374; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (MNV). The nucleic acid molecules are useful for  
 CC treating a condition related to MNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention

XX Sequence 17 BP; 3 A; 7 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.9e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2460 CGCATCTTGGAGAGG 2475  
 |||||  
 Db 17 CGCACTTGGAGAGG 2

## RESULT 2889

ACN06760  
 ID ACN06760 standard; RNA; 17 BP.

ACN06760;

22-APR-2004 (first entry)

MNV Amberzyme substrate SEQ ID NO 6763.

MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 encephalitis; myocarditis; meningitis; infection; hepatitis;  
 liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 Amberzyme; Zinzyne; ss.

West Nile Virus.

MO200268637-A2.

06-SEP-2002.

19-OCT-2001; 2001WO-US048350.

20-OCT-2000; 2000US-0242411P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MCSW/) MCSWIGGEN J A.

Blatt L, Mcswigen JA;

WPI; 2002-706994/76.

New nucleic acid molecule that modulates replication of West Nile Virus (MNV), useful for treating a condition related to MNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

Claim 23; SEQ ID NO 6763; 495bp; English.

The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (MNV). The nucleic acid molecules are useful for treating a condition related to MNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 1.9e+03;

Matches 13; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2460 CGCATCTTGGAGAGG 2475  
 |||||  
 Db 1 CGCACTTGGAGAGG 16

## RESULT 2890

ACN10372/c  
 ID ACN10372 standard; RNA; 17 BP.

ACN10372;

22-APR-2004 (first entry)

MNV minus strand Inozyme substrate SEQ ID NO 10375.

MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 encephalitis; myocarditis; meningitis; infection; hepatitis;  
 liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 Amberzyme; Zinzyne; ss.

West Nile Virus.

MO200268637-A2.

06-SEP-2002.

19-OCT-2001; 2001WO-US048350.

20-OCT-2000; 2000US-0242411P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MCSW/) MCSWIGGEN J A.

Blatt L, Mcswigen JA;

WPI; 2002-706994/76.

New nucleic acid molecule that modulates replication of West Nile Virus (MNV), useful for treating a condition related to MNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

Claim 23; SEQ ID NO 10375; 495bp; English.

The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (MNV). The nucleic acid molecules are useful for treating a condition related to MNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;

Best Local Similarity 93.8%; Pred. No. 1.9e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2460 CGCATCTTGGAGAGG 2475  
 |||||  
 Db 16 CGCACTTGGAGAGG 1

## RESULT 2891

ACA99803/c  
 ID ACA99803 standard; DNA; 17 BP.

ACA99803;

28-JUL-2003 (first entry)

```
XX DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #296.
XX XX
XX XX Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
XX KM G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
XX OS Homo sapiens.
XX PN WO2003031621-A2.
XX PD 17-APR-2003.
XX PF 11-OCT-2002; 2002WO-US032599.
XX PR 12-OCT-2001; 2001US-0329000P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Zhang J;
XX DR WPI; 2003-381720/36.
XX XX New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,
PT investigating and/or treating disorders associated with aberrant
PT expression or activity of GPCR-A-1, such as tumors and cancers.
XX PS Example 2; SEQ ID NO 320; 156bp; English.
XX XX The invention describes an isolated nucleic acid encoding a G protein
CC coupled receptor (GPCR), mutations of which cause cancer, comprising a
CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a
CC 409 residue amino acid sequence, all given in the specification, with or
CC without conservative amino acid substitutions, or complements of the
CC sequence of them. The encoding nucleic acid is not more than 100 kbase in
CC length. The methods and compositions of the present invention are useful
CC for diagnosing, investigating and/or treating disorders associated with
CC aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
CC This sequence represents an oligonucleotide used to analyse the gene
CC encoding human G-protein coupled receptor GPCR-A-1
XX SQ Sequence 17 BP; 2 A; 2 C; 5 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.9e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Gy 2913 CCAAGAGACCAATCA 2928
Db 16 CCAAGAGACCAATCA 1
RESULT 2892
ACA99802/C
ID ACA99802 standard; DNA; 17 BP.
XX AC ACA99802;
XX DT 28-JUL-2003 (first entry)
XX DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #295.
XX XX
XX KM Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
XX KM G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
XX OS Homo sapiens.
XX PN WO2003031621-A2.
XX PD 17-APR-2003.
XX PF 11-OCT-2002; 2002WO-US032599.
XX PR 12-OCT-2001; 2001US-0329000P.
```

```
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX XX
XX PI Zhang J;
XX DR WPI; 2003-381720/36.
XX XX New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,
PT investigating and/or treating disorders associated with aberrant
PT expression or activity of GPCR-A-1, such as tumors and cancers.
XX PS Example 2; SEQ ID NO 319; 156bp; English.
XX XX The invention describes an isolated nucleic acid encoding a G protein
CC coupled receptor (GPCR), mutations of which cause cancer, comprising a
CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a
CC 409 residue amino acid sequence, all given in the specification, with or
CC without conservative amino acid substitutions, or complements of the
CC sequence of them. The encoding nucleic acid is not more than 100 kbase in
CC length. The methods and compositions of the present invention are useful
CC for diagnosing, investigating and/or treating disorders associated with
CC aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
CC This sequence represents an oligonucleotide used to analyse the gene
CC encoding human G-protein coupled receptor GPCR-A-1
XX SQ Sequence 17 BP; 2 A; 2 C; 5 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.9e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Gy 2913 CCAAGAGACCAATCA 2928
Db 17 CCAAGAGACCAATCA 2
RESULT 2893
ADB03681/C
ID ADB03681 standard; DNA; 17 BP.
XX AC ADB03681;
XX DT 20-NOV-2003 (first entry)
XX DE Human MD27 scanning oligonucleotide SEQ ID 4667.
XX XX
XX KM Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX KM zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX KM chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX KM developmental disorder; ss.
XX OS Homo sapiens.
XX PN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002BP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX DR WPI; 2003-423107/40.
XX XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX PS Example 8; SEQ ID NO 4667; 103bp; English.
```

XX The present invention relates to novel human zinc finger-containing  
CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
CC encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,  
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
CC or in manufacturing a medicament for treating or preventing a disorder  
CC associated with decreased or increased expression or activity of MD23,  
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.

XX  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1189 AGCTGAGAGGCTCTAG 1204  
DB 17 AGCTGAGGAGGCTCTAG 2

RESULT 2894  
ADB03683/C  
ADB03683 standard; DNA; 17 BP.

XX ADB03683;  
XX  
XX 20-NOV-2003 (first entry)  
XX  
XX Human MD27 scanning oligonucleotide SEQ ID 4669.

XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
XX developmental disorder; ss.

XX Homo sapiens.

XX  
XX EP1281758-A2.

XX  
XX 05-FEB-2003.

XX  
XX 30-JUL-2002; 2002EP-00016874.

XX  
XX 02-AUG-2001; 2001US-00922181.

XX  
XX (ABOM-) ABOMICA INC.

XX  
XX Shannon M, Gu Y, Nguyen C;

XX  
XX WPI; 2003-423107/40.

XX  
XX New zinc finger-containing proteins and nucleic acids, useful in  
XX manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,  
XX MD24, MD27 or MD212, e.g. cancer.

XX  
XX Example 8; SEQ ID NO 4669; 103pp; English.

XX  
XX The present invention relates to novel human zinc finger-containing  
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
XX encoded at chromosome 7q22.1. MD24 is encoded at chromosome 6p21.3-22.2,  
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
XX or in manufacturing a medicament for treating or preventing a disorder  
XX associated with decreased or increased expression or activity of MD23,

CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
CC acids and proteins are also useful for diagnosing or monitoring a disease  
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
CC acids can also be used as probes to detect and characterize gross  
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
CC useful in constructing microarrays for measuring gene expression. The  
CC proteins are useful as therapeutic agents for gene therapy or as  
CC vaccines. The present sequence was used to illustrate the invention.

XX  
XX  
SQ Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1188 GAGCTGAGAGGCTCTCA 1203  
DB 16 GAGCTGAGGAGGCTCTCA 1

RESULT 2895  
ACD58288/C  
ACD58288 standard; RNA; 17 BP.

XX ACD58288;  
XX  
XX 24-SEP-2003 (first entry)  
XX  
XX HCV DNAzyme substrate sequence #762.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
XX RNA stability; RNA expression; RNA synthesis; antisense;  
XX enzymatic; G-cleaver ribozyme; DNAzyme; inozyme; zinzyme;  
XX ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
XX HBV reverse transcriptase; enhancer 1 region; viral replication;  
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
XX liver failure; hepatocellular carcinoma; hepatotropic; cytosstatic;  
XX viroicide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

XX  
XX MO200281494-A1.

XX  
XX 17-OCT-2002.

XX  
XX 26-MAR-2002; 2002WO-US009187.

XX  
XX 26-MAR-2001; 2001US-00817879.

XX  
XX 08-JUN-2001; 2001US-00877478.

XX  
XX 08-JUN-2001; 2001US-0296876P.

XX  
XX 24-OCT-2001; 2001US-0335059P.

XX  
XX 05-DEC-2001; 2001US-0337055P.

XX  
XX (RIBO-) RIBOZYME PHARM INC.

XX  
XX (BLAT/) BLATT L.

XX  
XX (MACE/) MACEJAK D.

XX  
XX (MCSW/) MCSWIGEN J.

XX  
XX (MORR/) MORRISSEY D.

XX  
XX (PAVC/) PAVCO P.

XX  
XX (LEBP/) LEE P.

XX  
XX (DRAP/) DRAPER K.

XX  
XX (ROBE/) ROBERTS E.

XX  
XX Blatt L, Macejak D, Mcswigen J, Morrissey D, Pavco P, Lee P;

XX  
XX Draper K, Roberts E;

XX  
XX WPI; 2003-229207/22.

XX  
XX Novel compound useful for treating cirrhosis, liver failure,  
XX hepatocellular carcinoma, or condition associated with hepatitis C virus  
XX infection.

XX  
XX Claim 1; Page 247; 387pp; English.

```

XX CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, ambezymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNazyme or minus strand DNazyme sequences disclosed in the present
CC invention
XX SQ
SQ Sequence 17 BP; 6 A; 2 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.9e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 2337 CACTTGCTATACCA 2352
Db 17 CACTTTGCTATACCA 2
RESULT 2896
ACD64381
ID ACD64381 standard; RNA; 17 BP.
XX ACD64381;
XX
XX 30-SEP-2003 (first entry)
DT HCV minus strand DNazyme substrate sequence #1516.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX ambezyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
OS
XX WO200281494-A1.
PN
XX 17-OCT-2002.
PD
XX 26-MAR-2002; 2002WO-US009187.
PF
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT-) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PACV/) PAVCO P.
PA (LEEF/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.

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XX CC Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI, 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1, Page 302, 387pp; English.
PS
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, ambezymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNazyme or minus strand DNazyme sequences disclosed in the present
CC invention
XX SQ
SQ Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 1.9e+03;
Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
OY 2337 CACTTGCTATACCA 2352
Db 2 CACUUGCUAUACCA 17
RESULT 2897
ACC67954/C
ID ACC67954 standard; DNA; 17 BP.
XX ACC67954;
XX
XX 01-JUL-2003 (first entry)
DT
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5201.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX tumour suppression; tumour reversion; apoptosis; virus resistance;
XX viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; ss.
XX
XX Mus musculus.
OS
XX WO2003025176-A2.
PN
XX 27-MAR-2003.
PD
XX 17-SEP-2002; 2002WO-IB004210.
PF
XX 17-SEP-2001; 2001FR-00011979.
PR
XX (MOLE-) MOLECULAR ENGINES LAB.
PA TeJerman A, Amson R, Tuijnder M;
PI WPI, 2003-333167/31.
XX

```



PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 PS Disclosure; Page 639; 738bp; French.  
 CC  
 CC The present invention relates to murine oligonucleotides (ACC62754-  
 CC ACC68806), which are associated with tumour suppression, tumour  
 CC reversion, apoptosis and virus resistance. The oligonucleotides are  
 CC useful as (1) as probes and primers for detecting, identifying,  
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 CC gene chip, in vitro as (anti)sense reagents; and (2) for production of a  
 CC recombinant polypeptides. The oligonucleotides are useful for preparation  
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia  
 CC  
 SQ Sequence 17 BP; 7 A; 3 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 4966 GCGTGGCTTCTGGATC 4981  
 DB 16 GCGTGGCTTCTGGATC 1  
 RESULT 2898  
 ADB39835  
 ID ADB39835 standard; DNA; 17 BP.  
 XX  
 AC ADB39835;  
 XX  
 DT 18-DEC-2003 (revised)  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Tumour suppression/reversion associated nucleotide #158.  
 XX  
 KW cytosstatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;  
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;  
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 OS  
 PN WO2003040369-A2.  
 XX  
 PD 15-MAY-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004219.  
 XX  
 PR 17-SEP-2001; 2001FR-00011981.  
 XX  
 PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 DR WPI; 2003-441574/41.  
 XX  
 PT New nucleic acid encoding human prostate membrane-specific antigen,  
 PT useful e.g. for treatment of tumors and viral infection, also related  
 PT polypeptide and antibodies.  
 XX  
 PS Disclosure; Page 50; 771pp; French.  
 XX  
 CC The invention relates to the isolation of 6337 nucleotide sequences,  
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a  
 CC sequence having at least 80% identity, after optimal alignment, with the  
 CC nucleotides, a sequence that hybridizes under stringent conditions with  
 CC the nucleotides, or the complement, or corresponding RNA, of the  
 CC nucleotides. The nucleotides are used as probes or primers for detecting,  
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro

CC sense and antisense sequences, of nucleotides involved in tumour  
 CC suppression or reversion, apoptosis and or viral resistance, to produce  
 CC recombinant polypeptides, and to prepare transgenic animals, as  
 CC experimental models. The nucleotides (also vectors containing them and  
 CC cells containing the vectors), the encoded polypeptides and antibodies  
 CC (Ab) against the polypeptide are useful for prevention and/or treatment  
 CC of viral infections or diseases characterized by development of tumours  
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).  
 CC Analysis of the expression of the nucleotides can be used for diagnosis  
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can  
 CC also be used to screen for their specific interactive molecules,  
 CC potentially useful for treating diseases associated with abnormal  
 CC expression of the nucleotides.  
 CC  
 SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 3945 ATCCCGAAAACCTCT 3960  
 DB 2 ATCCCGAAAACCTCT 17  
 RESULT 2899  
 ADC04972/c  
 ID ADC04972 standard; DNA; 17 BP.  
 XX  
 AC ADC04972;  
 XX  
 DT 18-DEC-2003 (first entry)  
 DT  
 XX  
 DE Human Na/H exchanger-like protein 1 gene oligonucleotide #1419.  
 XX  
 KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 KW NHEPL1; passive replacement therapy; vaccine; diagnosis.  
 XX  
 OS Homo sapiens.  
 OS  
 PN EP1273660-A2.  
 XX  
 PD 08-JAN-2003.  
 XX  
 PF 25-JAN-2002; 2002EP-00001160.  
 XX  
 PR 30-JAN-2001; 2001WO-US000666.  
 XX  
 PR 23-MAY-2001; 2001US-00864761.  
 XX  
 PR 21-DEC-2001; 2001US-0345331P.  
 XX  
 PA (ABOM-) ABOmica INC.  
 XX  
 PI Gu Y;  
 XX  
 DR WPI; 2003-302724/30.  
 XX  
 PT New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 PT passive replacement therapy or as a vaccine for treating or preventing  
 PT disorders associated with aberrant expression or activity of human  
 PT NHEPL1.  
 XX  
 PS Example 2; SEQ ID NO 1459; 468bp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup>  
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide, an antibody against the protein or its antigen-binding  
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide and an agonist are particularly useful for manufacturing a  
 CC medicament for treating or preventing a disorder associated with  
 CC decreased expression or activity of human NHEPL1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid

CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).  
 XX

SEQ Sequence 17 BP; 7 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4554 AACAGCATTTGTTG 4569  
 |||||  
 Db 17 AACATCATTTGTTG 2

RESULT 2900  
 ADC04973/C  
 ID ADC04973 standard; DNA; 17 BP.

XX ADC04973;  
 XX 18-DEC-2003 (first entry)

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #1420.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;  
 KM NHEPL1; passive replacement therapy; vaccine; diagnosis.

XX Homo sapiens.

PN EPI273660-A2.

PD 08-JAN-2003.

XX 25-JAN-2002; 2002EP-00001160.

XX 30-JAN-2001; 2001WO-US0000666.

PR 23-MAY-2001; 2001US-00864761.

PR 21-DEC-2001; 2001US-0343331P.

XX (AEOM-) AEOMICA INC.

XX WPI; 2003-302724/30.

XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a  
 PT passive replacement therapy or as a vaccine for treating or preventing  
 PT disorders associated with aberrant expression or activity of human  
 PT NHEPL1.

PS Example 2; SEQ ID NO 1460; 468bp; English.

XX The invention relates to a nucleic acid molecule which encodes a Na<sup>+</sup>/H<sup>+</sup>  
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide, an antibody against the protein or its antigen-binding  
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1  
 CC polypeptide and an agonist are particularly useful for manufacturing a  
 CC medicament for treating or preventing a disorder associated with  
 CC decreased expression or activity of human NHEPL1. The antibody or its  
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing  
 CC a medicament for treating or preventing a disorder associated with  
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid  
 CC or protein is useful as passive replacement therapy, as a vaccine, or in  
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide  
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).

XX Sequence 17 BP; 8 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4554 AACAGCATTTGTTG 4569  
 |||||  
 Db 16 AACATCATTTGTTG 1

RESULT 2901

ADC37824/C  
 ID ADC37824 standard; DNA; 17 BP.

XX ADC37824;

DE 18-DEC-2003 (first entry)

DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:173.

KM human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;  
 KM AMLP1a; ss.

XX Synthetic.

PN WO2003037931-A2.

PD 08-MAY-2003.

PF 01-NOV-2002; 2002WO-US035129.

PR 01-NOV-2001; 2001US-0334773P.

XX (AMSH) AMERSHAM BIOSCIENCES SV CORP.

XX Shannon M, Phan T;

DR WPI; 2003-430501/40.

XX New isolated nucleic acid molecule encoding a human angiomotin-like  
 PT protein, useful for treating or preventing a disorder associated with  
 PT decreased or increased expression or activity of AMLP1.

XX Example 2; SEQ ID NO 173; 172bp; English.

XX The present invention describes the human angiomotin-like protein 1  
 CC (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene  
 CC therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and  
 CC compositions of the present invention can be used for treating or  
 CC preventing a disorder associated with decreased or increased expression  
 CC or activity of AMLP1. The present sequence represents a scanning  
 CC oligonucleotide for human AMLP1a, which is used in an example from the  
 CC present invention.

XX Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGC 192  
 |||||  
 Db 16 CTGCTGCTGCTGCTGC 1

RESULT 2902

ADC37817/C  
 ID ADC37817 standard; DNA; 17 BP.

XX ADC37817;

DE 18-DEC-2003 (first entry)

DE Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:166.

XX human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;  
 KM AMLP1a; ss.

XX	OS	Synthetic.
XX	OS	Homo sapiens.
XX	PN	WO2003037931-A2.
XX	PD	08-MAY-2003.
XX	PF	01-NOV-2002; 2002WO-US035129.
XX	PR	01-NOV-2001; 2001US-0334773P.
XX	PA	(AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX	PI	Shannon M, Phan T;
XX	DR	WPI; 2003-430501/40.
XX	PT	New isolated nucleic acid molecule encoding a human angiotensin-like
XX	PT	protein, useful for treating or preventing a disorder associated with
XX	PT	decreased or increased expression or activity of AMLP1.
XX	PS	Example 2; SEQ ID NO 166; 172pp; English.
XX	CC	The present invention describes the human angiotensin-like protein 1
XX	CC	(AMLP1), human AMLP1 has cytosolic activity, and can be used in gene
XX	CC	therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and
XX	CC	compositions of the present invention can be used for treating or
XX	CC	preventing a disorder associated with decreased or increased expression
XX	CC	or activity of AMLP1. The present sequence represents a scanning
XX	CC	oligonucleotide for human AMLP1, which is used in an example from the
XX	CC	present invention.
XX	SO	Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
QY	Query Match	0.1%; Score 14.4; DB 1; Length 17;
QY	Best Local Similarity	93.8%; Pred. No. 1.9e+03;
Db	Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	
17	CTGCTGCTGCTGCTGC 192	
17	CTGTTGCTGCTGCTGC 2	
RESULT 2903		
ADL51684		
ID	ADL51684 standard; RNA; 17 BP.	
XX	AC	ADL51684;
XX	DT	20-MAY-2004 (first entry)
XX	DE	Human PTGDR substrate sequence #803.
XX	KW	antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX	KW	proteoglycanin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX	KW	protein kinase PKR; cerebrovascular accident;
XX	KW	central nervous system injury; CNS injury; spinal cord injury; cancer;
XX	KW	melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX	KW	restenosis; asthma; Crohn's disease; diabetes; obesity;
XX	KW	autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX	KW	graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX	KW	allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
XX	KW	substrate; ds.
XX	OS	Unidentified.
XX	PN	WO200281628-A2.
XX	PD	17-OCT-2002.
XX	PF	03-APR-2002; 2002WO-US010512.
XX	XX	

PR	05-APR-2001; 2001JUS-00827395.
PR	29-MAY-2001; 2001JUS-0294412P.
PR	28-AUG-2001; 2001JUS-0315315P.
PA	(RIBO-) RIBOZYME PHARM INC.
PI	Blatt L, Chowrira B, Haeblerl P, Mcswiggen J, Fosnaugh K;
DR	WFI; 2003-058513/05.
XX	
PT	Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
PS	Claim 161; SEQ ID NO 5217; 317pp; English.
XX	
CC	The invention comprises nucleic acids (e.g. antisense oligonucleotides) that down regulate the expression or inhibit the function of a receptor for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR), IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the invention are useful for treating: cerebrovascular accident, central nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma, lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis, tendinitis or asthma), Crohn's disease, diabetes, obesity, autoimmune ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The nucleic acids of the invention are also useful for down-regulating the expression of a target gene and as a diagnostic tool to examine genetic drifts and mutations within diseased cells or to detect the presence of a target RNA in a cell. The present RNA sequence represents a human PKR substrate sequence.
CC	
CC	
CC	
CC	
SQ	Sequence 17 BP; 1 A; 4 C; 7 G; 0 T; 5 U; 0 Other;
XX	
Query Match	0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity	68.8%; Pred. No. 1.9e+03;
Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;	
QY	149 GCTGCTGGCGCTGCTG 164    ::     ::  Db 2 GCUCUGCGCUGAUG 17
RESULT 2904	
ADL51561	
ID ADL51561 standard; RNA; 17 BP.	
AC	
ADL51561;	
XX	
DT 20-MAY-2004 (first entry)	
DE Human PTGDR substrate sequence #680.	
XX	
KM antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;	
KM protein kinase PKR; cerebrovascular accident;	
KM central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis; reestenosis; asthma; Crohn's disease; diabetes; obesity;	
KM autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR; substrate; dd.	
OS Unidentified.	
XX	
XX WO200281628-A2.	
PN	
PD 17-OCT-2002.	
PF 03-APR-2002; 2002WO-US010512.	
XX	

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PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, McSwiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 5094; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human PKR
XX substrate sequence.
XX
SQ Sequence 17 BP; 0 A; 5 C; 9 G; 0 T; 3 U; 0 Other:
XX
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 1.9e+03;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 153 CTGGCGCTGCTGGCGC 168
Db 1 CTGGCGCTGCTGGCGC 16
XX
RESULT 2905
ADL51239
ID ADL51239 standard; RNA; 17 BP.
XX
XX ADL51239;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human PTGDR substrate sequence #358.
DE
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
XX substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX

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PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, McSwiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 4772; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human PKR
XX substrate sequence.
XX
SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other:
XX
Query Match 0.1%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 1.9e+03;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 153 CTGGCGCTGCTGGCGC 168
Db 2 CTGGCGCTGCTGGCGC 17
XX
RESULT 2906
AD186547
ID AD186547 standard; RNA; 17 BP.
XX
XX AD186547;
AC
XX
XX 03-JUN-2004 (first entry)
DT
XX
XX HCV DNAzyme substrate sequence #3793.
DE
XX
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNAzyme.
XX
XX Hepatitis C virus.
OS
XX
XX US2003125270-A1.
PN
XX
XX 03-JUL-2003.
PD
XX
XX 18-DEC-2000; 2000US-00740332.
PF
XX
XX 18-DEC-2000; 2000US-00740332.
PR
XX
XX (BLAT/) BLATT L.
XX (MCSM/) MCSWIGGEN J.
XX (ROBE/) ROBERTS E.
XX (PAVC/) PAVCO P A.
XX (MACE/) MACEJACK D.
XX

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PI Blact L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
XX WPI; 2004-031273/03.  
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
XX Claim 1; SEQ ID NO 3793; 198bp; English.  
XX  
XX The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I  
CC interferons. The present sequence represents a HCV DNazyme substrate  
CC sequence.  
XX  
SQ Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;  
Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 1.9e+03;  
Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;  
QY 2337 CACTTGGCTATPACCA 2352  
DB 2 CACUUCUACUADACCA 17  
RESULT 2907  
ACN64923  
ID ACN64923 standard; DNA; 17 BP.  
XX  
XX ACN64923;  
XX  
XX 02-DEC-2004 (first entry)  
XX  
XX Human GDMLP-1 probe SEQ ID NO:1825.  
DE  
XX Human; ss; probe; myosin-like protein-1; hGDMLP-1;  
KW hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;  
KW skeletal muscle function.  
XX  
XX Homo sapiens.  
OS  
XX US2004137589-A1.  
PN  
XX  
XX 15-JUL-2004.  
PD  
XX  
XX 26-NOV-2003; 2003US-00723361.  
PF  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 05-FEB-2001; 2001US-026860P.  
PR 25-MAY-2001; 2001US-00866108.  
XX  
XX  
XX (GUY/) GU Y.  
PA (UIY/) UI Y.  
PA (PENN/) PENN S G.  
PA (HANZ/) HANZEL D K.

PA (RANK/) RANK D.  
PA (CHEN/) CHEN W.  
PA (SHAN/) SHANNON M E.  
XX  
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;  
PT WPI; 2004-533378/51.  
DR  
XX  
XX Novel myosin-like protein-1, useful for treating or preventing disorder  
PT associated with decreased expression or activity of human genome-derived  
PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle  
PT function.  
XX  
XX Disclosure; SEQ ID NO 1825; 0pp; English.  
XX  
XX The invention relates to a novel polypeptide (I) comprising a sequence  
CC (SI) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully  
CC defined in the specification, a fragment of at least 8 amino acids of  
CC (SI), 95% deviation from (SI) which are conservative substitutions, and  
CC 65% identity to (SI). A polypeptide of the invention acts as a agonist or  
CC antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A  
CC pharmaceutical composition of the invention is useful for treating or  
CC preventing a disorder associated with decreased expression or activity of  
CC hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.  
CC The present sequence represents a 17-mer nucleotide, used in the  
CC invention for scanning the sequence represented in ACN63102  
XX  
SQ Sequence 17 BP; 8 A; 5 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 0.1%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1677 ACAAGCATCACTGA 1692  
DB 2 ACAPAAACATCACTGA 17  
RESULT 2908  
ACN64924  
ID ACN64924 standard; DNA; 17 BP.  
XX  
XX ACN64924;  
XX  
XX 02-DEC-2004 (first entry)  
XX  
XX Human GDMLP-1 probe SEQ ID NO:1826.  
DE  
XX Human; ss; probe; myosin-like protein-1; hGDMLP-1;  
KW hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;  
KW skeletal muscle function.  
XX  
XX Homo sapiens.  
OS  
XX US2004137589-A1.  
PN  
XX  
XX 15-JUL-2004.  
PD  
XX  
XX 26-NOV-2003; 2003US-00723361.  
PF  
XX  
XX 26-MAY-2000; 2000US-0207456P.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
PR 30-JAN-2001; 2001WO-US000661.  
PR 30-JAN-2001; 2001WO-US000662.  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.

PR 30-JAN-2001; 2001WO-US000670.  
 PR 05-FEB-2001; 2001US-0266860P.  
 PR 25-MAY-2001; 2001US-00866108.  
 XX  
 PA (GUYV/) GU Y.  
 PA (UIYV/) JI Y.  
 PA (PENN/) PENN S G.  
 PA (HANZ/) HANZEL D K.  
 PA (RANK/) RANK D.  
 PA (CHEN/) CHEN W.  
 PA (SHAN/) SHANNON M E.  
 XX  
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;  
 XX WPI; 2004-533378/51.  
 DR  
 XX Novel myosin-like protein-1, useful for treating or preventing disorder  
 PT associated with decreased expression or activity of human genome-derived  
 PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle  
 PT function.  
 XX  
 PS Disclosure; SEQ ID NO 1826; Opp; English.  
 CC The invention relates to a novel polypeptide (I) comprising a sequence  
 CC (S1) of myosin-like protein-1 (hGDMPL-1) having 2568 amino acids fully  
 CC defined in the specification, a fragment of at least 8 amino acids of  
 CC (S1); 95% deviation from (S1) which are conservative substitutions, and  
 CC 65% identity to (S1). A polypeptide of the invention acts as a agonist or  
 CC antagonist of hGDMPL-1, or as an inhibitor of hGDMPL-1 activity. A  
 CC pharmaceutical composition of the invention is useful for treating or  
 CC preventing a disorder associated with decreased expression or activity of  
 CC hGDMPL-1, such as a disorder of heart and/or skeletal muscle function.  
 CC The present sequence represents a 17-mer nucleotide, used in the  
 CC invention for scanning the sequence represented in ACN63102  
 CC  
 XX  
 SQ Sequence 17 BP; 8 A; 5 C; 2 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 17;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1677 ACAAGGCATCCTGCA 1692  
 Db 1 ACAAAACCATCCTGCA 16  
 RESULT 2909  
 AAQ70340/c  
 ID AAQ70340 standard; DNA; 18 BP.  
 XX  
 AC AAQ70340;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 15-FEB-1995 (first entry)  
 XX  
 DE Antisense oligonucleotide for human FGF.  
 XX  
 KW Fibroblast growth factor; hybridisation; laser procedures;  
 KW vascular smooth muscle cell; proliferation; SMC; vascular stenosis;  
 KW post angioplasty restenosis; atherosclerosis; cardiac hypertrophy;  
 KW organ transplant; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9415945-A1.  
 PN  
 PD 21-JUL-1994.  
 PD  
 XX 28-DEC-1993; 93WO-US012600.  
 XX  
 PR 31-DEC-1992; 92US-00999706.  
 XX  
 PA (TEXA-) TEXAS BIOTECHNOLOGY CORP.

XX  
 PI Denner LA, Rege AA, Dixon RA;  
 XX  
 DR WPI; 1994-249123/30.  
 XX  
 XX New anti-sense polynucleotide(s) to fibroblast growth factor receptor -  
 PT used for inhibiting vascular smooth muscle cell proliferation, partic.  
 PT for treating restenosis.  
 XX  
 PS Claim 3; Page 8; 53pp; English.  
 CC  
 CC The sequence is an antisense molecule directed against the gene for human  
 CC fibroblast growth factor 4. The polynucleotide can be used for inhibiting  
 CC vascular smooth muscle cell proliferation and for treating a disease e.g.  
 CC vascular stenosis, post angioplasty restenosis, atherectomy,  
 CC atherosclerosis, atrial venous shunt failure, cardiac hypertrophy,  
 CC vascular surgery and organ transplant. See also AAQ70333-60. (Updated on  
 CC 25-MAR-2003 to correct PN field.)  
 CC  
 XX  
 SQ Sequence 18 BP; 4 A; 7 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 181 TGCTGCTGCTGCTGCG 196  
 Db 17 TGCGGCTGCTGCTGCG 2  
 RESULT 2910  
 AAT28333/c  
 ID AAT28333 standard; DNA; 18 BP.  
 XX  
 AC AAT28333;  
 XX  
 DT 20-NOV-1996 (first entry)  
 DT  
 XX  
 DE Multi-G oligonucleotide hu SCR (I2G2).  
 XX  
 KW Multi-G oligonucleotide; antisense sequence; c-myc; nuclease resistant;  
 KW phosphorothioate linkage; phosphorodithioate linkage; inhibitor; therapy;  
 KW cell proliferation; smooth muscle cell; proliferation protein;  
 KW vascular restenosis; arterial restenosis; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 6 /\*tag= a  
 FT /\*mod\_base= i  
 FT modified\_base 7 /\*tag= b  
 FT /\*mod\_base= i  
 XX  
 PN WO9611266-A2.  
 PN  
 PD 18-APR-1996.  
 PD  
 XX 03-OCT-1995; 95WO-US012770.  
 XX  
 PR 05-OCT-1994; 94US-00318458.  
 XX  
 PA (AMGE-) AMGEN INC.  
 PA  
 PI Burgess TL, Farrell CL, Fisher EF;  
 XX  
 DR WPI; 1996-209848/21.  
 DR  
 XX New modified oligo:nucleotide(s) contg. consecutive guanine residues -  
 PT inhibit proliferation of smooth muscle cells, esp. to prevent arterial  
 PT restenosis.  
 XX

PS Example 1; Page 46; 67pp; English.  
 XX AAT28317-T28347 represent multi-G oligonucleotides. AAT28332-T28335 are  
 CC multi-G oligonucleotides with inosine substitutions. These sequences are  
 CC oligonucleotides of the invention. These sequences can be modified to  
 CC become more nuclease resistant, using phosphorothioate,  
 CC phosphorodithioate, or 3'-carbon modified links. To screen for modified  
 CC multi-G sequences that inhibit cell proliferation, cultured smooth muscle  
 CC cells that are arrested in the G0 phase, are induced to proliferate in  
 CC the presence of the multi-G sequence. The cultured smooth muscle cells  
 CC used in this method are attached to a solid support, and growth arrest is  
 CC achieved on a starvation medium, followed by transfer to a normal growth  
 CC medium to induce proliferation. The compounds that provide over 50%  
 CC inhibition at a set dosage are selected as being useful for inhibiting  
 CC vascular restenosis. The multi-G oligonucleotides are used to inhibit  
 CC proliferation of smooth muscle cells, such as to prevent arterial  
 CC restenosis. These sequences are not antisense sequences, but are thought  
 CC to work in a similar way. The sequences are thought to act by binding to  
 CC proteins involved in the proliferation process. Compounds containing  
 CC these multi-G oligonucleotides are not toxic, and their effect on cell  
 CC proliferation is fully reversible  
 CC  
 SQ Sequence 18 BP; 0 A; 5 C; 7 G; 4 T; 0 U; 2 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred.No. 2e+03; 3; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 103 CAGGAGCGCCGCCACCGC 120  
 Db 18 CAGGAGCGCCGCCNNACAGC 1  
 RESULT 2911  
 AAT28334/c  
 ID AAT28334 standard; DNA; 18 BP.  
 AC AAT28334;  
 XX  
 DT 20-NOV-1996 (first entry)  
 XX  
 DE Multi-G oligonucleotide hu SCR (G212).  
 XX  
 KW Multi-G oligonucleotide; antisense sequence; c-myc; nuclease resistant;  
 KW phosphorothioate linkage; phosphorodithioate linkage; inhibitor; therapy;  
 KW cell proliferation; smooth muscle cell; proliferation protein;  
 KW vascular restenosis; arterial restenosis; ss.  
 XX  
 OS Synthetic.  
 FH Key location/Qualifiers  
 FT modified\_base 8 /\*tag= a  
 FT /\*tag= a  
 FT /mod\_base= i  
 FT modified\_base 9 /\*tag= b  
 FT /\*tag= b  
 FT /mod\_base= i  
 XX  
 PN WO9611266-A2.  
 XX  
 PD 18-APR-1996.  
 XX  
 PF 03-OCT-1995; 95WO-US012770.  
 XX  
 PR 05-OCT-1994; 94US-00318458.  
 XX  
 PA (AMGE-) AMGEN INC.  
 XX  
 PI Burgess TL, Farrell CL, Fisher EF;  
 XX  
 DR WPI; 1996-209848/21.  
 XX  
 PT New modified oligo:nucleotide(s) contg. consecutive guanine residues -

PT inhibit proliferation of smooth muscle cells, esp. to prevent arterial  
 PT restenosis.  
 XX  
 PS Example 1; Page 47; 67pp; English.  
 XX  
 CC AAT28317-T28347 represent multi-G oligonucleotides. AAT28332-T28335 are  
 CC multi-G oligonucleotides with inosine substitutions. These sequences are  
 CC oligonucleotides of the invention. These sequences can be modified to  
 CC become more nuclease resistant, using phosphorothioate,  
 CC phosphorodithioate, or 3'-carbon modified links. To screen for modified  
 CC multi-G sequences that inhibit cell proliferation, cultured smooth muscle  
 CC cells that are arrested in the G0 phase, are induced to proliferate in  
 CC the presence of the multi-G sequence. The cultured smooth muscle cells  
 CC used in this method are attached to a solid support, and growth arrest is  
 CC achieved on a starvation medium, followed by transfer to a normal growth  
 CC medium to induce proliferation. The compounds that provide over 50%  
 CC inhibition at a set dosage are selected as being useful for inhibiting  
 CC vascular restenosis. The multi-G oligonucleotides are used to inhibit  
 CC proliferation of smooth muscle cells, such as to prevent arterial  
 CC restenosis. These sequences are not antisense sequences, but are thought  
 CC to work in a similar way. The sequences are thought to act by binding to  
 CC proteins involved in the proliferation process. Compounds containing  
 CC these multi-G oligonucleotides are not toxic, and their effect on cell  
 CC proliferation is fully reversible  
 CC  
 SQ Sequence 18 BP; 0 A; 5 C; 7 G; 4 T; 0 U; 2 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 83.3%; Pred.No. 2e+03; 3; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 103 CAGGAGCGCCGCCACCGC 120  
 Db 18 CAGGAGCGCCGCCNNACAGC 1  
 RESULT 2912  
 AAX75599  
 ID AAX75599 standard; RNA; 18 BP.  
 AC AAX75599;  
 XX  
 DT 28-JUL-1999 (first entry)  
 XX  
 DE Mouse flt-1 VEGF receptor hairpin ribozyme substrate #58.  
 XX  
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;  
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;  
 KW foetal liver kinase 1; ss.  
 XX  
 OS Mus sp.  
 FH  
 FT MO9715662-A2.  
 XX  
 PD 01-MAY-1997.  
 XX  
 PF 25-OCT-1996; 96WO-US017480.  
 XX  
 PR 26-OCT-1995; 95US-0005974P.  
 XX  
 PR 11-JAN-1996; 96US-00584040.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI (CHIR ) CITRON CORP.  
 XX  
 DR Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
 XX  
 DR WPI; 1997-259017/23.  
 XX  
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
 PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 187; 218pp; English.  
 PS  
 CC The present invention describes nucleic acid molecules which modulate the  
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more  
 CC receptors of vascular endothelial growth factor (VEGF). A patient  
 CC (preferably human) having a condition associated with the level of the  
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
 CC treated by administering the nucleic acid molecule or the expression  
 CC vector to the patient. AAX67275 to AAX75752 represent specific examples  
 CC of nucleic acid molecules from the present invention  
 CC  
 SQ Sequence 18 BP; 6 A; 5 C; 2 G; 0 T; 5 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 62.5%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
 Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;  
 QY 4320 GACCTGCTTCTCTACA 4335  
 ||||| :|||:  
 Db 3 GACCTGAUUCUCCUACA 18  
 RESULT 2913  
 AAV51900  
 ID AAV51900 standard; DNA; 18 BP.  
 XX  
 AC AAV51900;  
 XX  
 DT 02-FEB-1999 (first entry)  
 XX  
 DE Zea mays genome reverse PCR primer #196.  
 XX  
 KW Polymorphic marker; allele-specific; probe; amplification; PCR primer;  
 KW hybridisation; plant; hybrid certification; genetic contribution;  
 KW progeny; back-cross; hybrid; ancestry; corn; ss.  
 XX  
 OS Synthetic.  
 OS Zea mays.  
 OS  
 PN WO9824796-A1.  
 XX  
 PD 11-JUN-1998.  
 XX  
 PF 01-DEC-1997; 97WO-US021782.  
 XX  
 PR 02-DEC-1996; 96US-0032069P.  
 PR 07-MAR-1997; 97US-00813507.  
 XX  
 PA (APFY-) APFYMETRIX INC.  
 PI Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;  
 DR WPI, 1998-333252/29.  
 XX  
 PT Brassica species allele-specific oligonucleotide probes and primers -  
 PR useful for plant breeding.  
 XX  
 PS Example 1; Page 53; 65pp; English.  
 CC AAV51705-V52008 are reverse PCR primers used to amplify fragments of the  
 CC Zea mays genome in order to detect polymorphic markers. Such markers can  
 CC be used in the construction of allele-specific primers and probes for  
 CC amplification or hybridisation, e.g. to determine common or disparate  
 CC ancestry between 2 or more plants, to monitor the genetic contribution of  
 CC an ancestral plant, to trace the progeny of proprietary plants, in  
 CC certification of a hybrid plant or to identify the progeny of a back-  
 CC crossed plant with an ancestral plant  
 CC  
 SQ Sequence 18 BP; 0 A; 4 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 185 GCTGCTGTGCGGCGC 200  
 ||||| :|||:  
 Db 3 GCTGCTGTGCGTGGCGC 18  
 RESULT 2914  
 AA241212  
 ID AA241212 standard; DNA; 18 BP.  
 XX  
 AC AA241212;  
 XX  
 DT 26-JAN-2000 (first entry)  
 XX  
 DE Human AKT-1 phosphorothioate antisense oligonucleotide SEQ ID NO:364.  
 XX  
 KW Identification; genetic target; gene modulation; human; probe;  
 KW antisense oligonucleotide; phosphorothioate; PCR primer;  
 KW nucleotide sequence-based technology; antisense drug discovery;  
 KW target validation; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 OS  
 PN WO953101-A1.  
 XX  
 PD 21-OCT-1999.  
 XX  
 PF 13-APR-1999; 99WO-US008268.  
 XX  
 PR 13-APR-1998; 98US-0081483P.  
 PR 28-APR-1998; 98US-00067638.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 PI Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;  
 PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;  
 DR WPI, 1999-620446/53.  
 XX  
 PT Identifying compounds which modulate expression of nucleic acids, used to  
 PT provide compounds having defined physical, chemical or bioactive  
 PT properties, e.g. antisense activity.  
 XX  
 PS Example 30; Page 114; 264pp; English.  
 XX  
 CC A method has been developed of defining a set of compounds that modulate  
 CC the expression of a target nucleic acid (tNA) sequence via binding of the  
 CC compounds with the tNA sequence. The method comprises generating a  
 CC library of virtual compounds in silico according to defined criteria, and  
 CC evaluating in silico the binding of the virtual compounds with the tNA  
 CC according to defined criteria. Also described are: (1) a method of  
 CC defining a set of oligonucleotides (ONs) that modulate the expression of  
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising  
 CC generating a library of virtual compounds in silico according to defined  
 CC criteria, and evaluating in silico the binding of the virtual ONs with  
 CC the tNA according to defined criteria; and (2) a method of defining a set  
 CC of compounds that modulate the expression of a tNA sequence via binding  
 CC of the compounds with the tNA. The methods can be used for the generation  
 CC and identification of synthetic compounds having defined physical,  
 CC chemical or bioactive properties. Information gathered from assays of  
 CC such compounds is used to identify nucleic acid sequences that are  
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
 CC antisense drug discovery and target validation. AA240852 to AA241220, and  
 CC AAV52701 to AAV52706, represent sequences used in the exemplification of  
 CC the present invention  
 CC  
 SQ Sequence 18 BP; 7 A; 4 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;



Best Local Similarity 93.8%; Pred. No. 2e+03;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 3194 CCAGAGAGAGACAGA 3209  
Db 2 CCAGAGAGATGACAGA 17

RESULT 2915  
AA34896/C  
ID AA34896 standard; DNA; 18 BP.

AC AA34896;

DT 28-JUN-1999 (first entry)

DE PCR primer used to amplify FGFR4.

KW Immortalized human hair papilla cell; HPC; screening; hair growth;  
KW SV40 viral large T-antigen gene; deleted replication initiation point;  
KW hair growth stimulating agent; PCR primer; ss.

OS Synthetic.

PN JP11089565-A.

PD 06-APR-1999.

PF 19-SEP-1997; 97JP-00271927.

PR 19-SEP-1997; 97JP-00271927.

PA (SHIS ) SHISEIDO CO LTD.

WI; 1999-281045/24.

PT Immortalized human hair papilla cells used for evaluation of hair growth  
PT agent - are prepared by transformation of human hair papilla cells with  
PT gene with deleted replication initiation point.

PS Example 2; Page 7; 23pp; Japanese.

CC The specification describes the preparation of immortalized human hair  
CC papilla cells (HPC). The method comprises transformation of HPC with an  
CC SV40 viral large T-antigen gene with deleted replication initiation  
CC point. The immortalized HPC can be used in a screening method for a hair  
CC growth agent, by culture of immortalized HPC in the presence of a  
CC substance to be tested and observation of the growth of the immortalized  
CC HPC. HPC is also used in development of hair growth stimulating agents.  
CC The present sequence represents a PCR primer, which is used in the course  
CC of the invention

SO Sequence 18 BP; 6 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGCGC 196  
Db 16 TGCTGCTGCTGCTGCGC 1

RESULT 2916  
AA22228

ID AA22228 standard; DNA; 18 BP.

AC AA22228;

DT 26-NOV-1999 (first entry)

DE Human Akt-1 mRNA inhibiting antisense oligo ISIS #28911.

KW Human; Akt-1; antisense; diagnostic; therapeutic; prophylaxis; infection;  
KW inflammation; tumor formation; ss.

OS Synthetic.

OS Homo sapiens.

PN US5958773-A.

PD 28-SEP-1999.

PF 17-DEC-1998; 98US-00212771.

PR 17-DEC-1998; 98US-00212771.

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Cowest LM;

WI; 1999-561048/47.

PT Antisense compounds complementary to Akt-1 useful for, e.g. diagnostics,  
PT therapeutics and as research reagents.

PS Claim 3; Col 39; 32pp; English.

CC The invention provides antisense compounds of 8-30 nucleotides that  
CC inhibit the expression of human Akt-1. The antisense compounds may be  
CC used for diagnostics, therapeutics (for modulating the expression of Akt-  
CC 1), prophylaxis (e.g. to prevent or delay infection, inflammation, or  
CC tumor formation), as research reagents (e.g. to distinguish between  
CC members of a biological pathway) and in kits. Sequences AA22197-236  
CC represent phosphorothioate oligonucleotides used for antisense inhibition  
CC of Akt-1 mRNA

SO Sequence 18 BP; 7 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3194 CCAGAGAGAGACAGA 3209  
Db 2 CCAGAGAGATGACAGA 17

RESULT 2917

ID AAA67065 standard; DNA; 18 BP.

AC AAA67065;

DT 19-OCT-2000 (first entry)

DE Human leukocyte antigen C allele DNA probe 353TCC SEQ ID NO:123.

KW Human leukocyte antigen; HLA; class I allele type; probe; PCR primer;  
KW amplification; hybridisation; organ transplant; gene typing; diagnosis;  
KW ss.

OS Homo sapiens.

PN WO200031295-A1.

PD 02-JUN-2000.

PF 07-OCT-1999; 99WO-UP005527.

PR 26-NOV-1998; 98JP-0035151.

PA (SHIO ) SHIONOGI & CO LTD.

PI Moribe T, Kaneshige T;

DR WPI; 2000-400097/34.  
 XX Simple, rapid and accurate method for distinguishing HLA class I allele  
 PT type with possibility of mechanization and automation, applicable in  
 PT judging donor-recipient compatibility during organ transplant and disease  
 PT diagnosis.  
 XX  
 XX Claim 8; Page 78; 83pp; Japanese.  
 PS  
 CC The present invention describes a method for distinguishing a human  
 CC leukocyte antigen (HLA) class I antigen or allele by a combination of  
 CC polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B  
 CC or -C alleles can be amplified or using reverse hybridisation analysis  
 CC comprising a DNA probe covalently bonded to microtitre plate wells which  
 CC are hybridisable specifically with the base sequence of at least one  
 CC specific HLA-A, -B or -C allele. The method is applicable in gene typing,  
 CC judging donor-recipient compatibility during organ transplant and  
 CC correlation analysis for diagnosis of various diseases. The method is  
 CC simple, rapid and accurate, with possibility of mechanisation and  
 CC automation, without the problems encountered by using the prior-art  
 CC techniques. AAA66943 to AAA67072 represent oligonucleotide probes and PCR  
 CC primers for use in the method of the present invention  
 CC  
 SQ Sequence 18 BP; 4 A; 7 C; 3 G; 4 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1303 CTCACATCTCTCAGTG 1318  
 Db 3 CTCACATCTCTCAGAG 18  
 RESULT 2918  
 ID AA299446 standard; DNA; 18 BP.  
 AC AA299446;  
 XX  
 XX 03-JUN-2000 (first entry)  
 DT  
 DE Primer B0H14 for the cotton gibberellin 3beta-hydroxylase cDNA.  
 XX  
 KM Gibberellin acid, copaly] diphosphate synthase; 3beta-hydroxylase;  
 KM 2-oxidase; phytoene synthase; C-20 oxidase; 2beta,3beta-hydroxylase;  
 KM seed germination; seedling growth; gibberellin biosynthetic pathway;  
 KM transgenic plant; hypocotyl; epicotyl; PCR primer; ss.  
 XX  
 OS Gossypium hirsutum.  
 XX  
 PN WO200009722-A2.  
 PD  
 XX 24-FEB-2000.  
 PF 10-AUG-1999; 99WO-US018066.  
 XX  
 PR 10-AUG-1998; 98US-0096111P.  
 PR 07-JUN-1999; 99US-0137977P.  
 XX  
 PA (MONS ) MONSANTO CO.  
 XX  
 PI Brown SM, Ellich TD, Heck GR, Kishore GM, Logusch EW, Logusch SJ;  
 PI Piller KJ, Rao S, Ream JE;  
 XX  
 DR WPI; 2000-224351/19.  
 PT Obtaining transgenic plant useful for controlling seed germination and  
 PT seedling growth comprises transgene comprising a sequence expressing  
 PT altered levels of an essential hormone.  
 XX  
 XX Example 6; Page 96; 267pp; English.  
 XX

CC PCR primers AA299443-49 were used to amplify a gibberellin 3beta-  
 CC hydroxylase cDNA fragment. The amplified sequence is used in the method  
 CC of the invention. The specification describes methods for the inhibition  
 CC and control of gibberellin acid levels. Gibberellin acid levels may be  
 CC inhibited or controlled by use of a chimeric expression construct  
 CC expressing a RNA or protein which suppresses the gibberellin biosynthetic  
 CC pathway sequence, diverts substrate from the pathway, or degrades pathway  
 CC substrates or products. The methods uses copaly] diphosphate synthase,  
 CC 3beta-hydroxylase, 2-oxidase, phytoene synthase, C-20 oxidase, and a  
 CC 3beta,3beta-hydroxylase polynucleotides to achieve this. The method is  
 CC used to control seed germination and seedling growth especially to  
 CC regulate gene products of gibberellin biosynthetic pathway and  
 CC restoration of normal seed germination, in transgenic plants. The plants  
 CC produced are gibberellin deficient, and have shortened hypocotyl and/or  
 CC epicotyl phenotypes compared to normal plants  
 CC  
 SQ Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;  
 Query Match 0.1%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 4708 TCCAAAGCACCAACCA 4723  
 Db 18 TCCAAAGTCCCAACCA 3  
 RESULT 2919  
 ID AAS21691 standard; DNA; 18 BP.  
 AC AAS21691;  
 XX  
 XX 21-NOV-2001 (first entry)  
 DT  
 DE Human Survivin antisense oligonucleotide #156.  
 XX  
 KM Survivin; human; mouse; cytostatic; antisense oligonucleotide;  
 KM hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200157059-A1.  
 PD  
 XX 09-AUG-2001.  
 XX  
 PF 30-JAN-2001; 2001WO-US002939.  
 XX  
 PR 02-FEB-2000; 2000US-00496694.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI Bennett CF, Ackermann EJ, Swayze BE, Cowsett LM;  
 XX  
 DR WPI; 2001-488863/53.  
 PT Novel antisense compounds for modulating the expression of Survivin and  
 PT treatment of cancer.  
 XX  
 PS Example 17; Page 58; 120pp; English.  
 XX  
 XX The invention relates to antisense oligonucleotides targeted to a nucleic  
 CC acid molecule encoding human Survivin, where the antisense  
 CC oligonucleotide inhibits the expression of human Survivin. These  
 CC antisense oligonucleotides are used in the treatment of an animal  
 CC suffering from a disease or condition associated with Survivin, e.g. a  
 CC hyperproliferative condition such as cancer, and comprises administering  
 CC a therapeutically or prophylactically effective amount of the antisense  
 CC oligonucleotide so that expression of Survivin is inhibited. The  
 CC oligonucleotides can also be used to treat a human suffering from a  
 CC disease or condition characterised by a reduction in apoptosis comprising  
 CC administering the antisense oligonucleotide to a human. In addition, the

CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.  
CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the  
CC cell cycle, or inhibit the proliferation in a cancer cell by contacting  
CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent  
CC Survivin nucleic acids, and antisense oligonucleotides targeted to  
CC Survivin, used in the method of the invention

XX Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3171 TCTGTCAGCGCAACCT 3186  
Db 16 TCTGTCAGCGCAACCT 1

RESULT 2920  
ABK40928/c  
ID ABK40928 standard; DNA; 18 BP.

XX AC ABK40928;

XX DT 21-MAY-2002 (first entry)

XX DE Human obesity-associated biallelic marker upstream PCR primer #5.

XX KW Human; obesity associated-biallelic marker; chromosome 10; obesity; ss;  
XX drug response; hyperuricaemia; digestive pathology; hypertension; cancer;  
XX hepatic function disorder; cardiovascular disease; hyperlipidaemia; PCR;  
XX insulin disorder; atheromatous disease; cardiac insufficiency; primer.

XX OS Homo sapiens.

XX PN MO200206525-A2.

XX PD 24-JAN-2002.

XX PF 28-JUN-2001; 2001WO-IB001477.

XX PR 18-JUL-2000; 2000US-0219704P.

XX XX (GEST ) GENSET.

XX PI Cohen D, Blumenfeld M, Chumakov I, Abderrahim H, Bihain B;

XX DR WPI; 2002-155043/20.

XX PT Set of novel map-related biallelic markers, preferably located on obesity  
XX disorder-associated chromosomal regions on chromosomes 3, 10 and 19,  
XX useful, for e.g. detecting statistical correlations between marker allele  
XX and a phenotype.

XX PS Example 2; Page 228; 31pp; English.

XX CC The invention relates to a set of novel map-related biallelic markers,  
XX preferably located on obesity disorder-associated chromosomal regions on  
XX chromosomes 3, 10 and 19. The markers are useful for genotyping or  
XX estimating the frequency of an allele in a population, for detecting an  
XX association between a genotype or haplotype and a phenotype, e.g. a  
XX disease involving drug responses, obesity or disorders related to  
XX obesity, such as hyperuricaemia, digestive pathology, hepatic function  
XX disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia,  
XX insulin disorders, atheromatous disease and cardiac insufficiency. The  
XX markers are useful for detecting a statistical correlation between a  
XX biallelic marker allele and a phenotype and/or between a biallelic marker  
XX haplotype and a phenotype. This sequence represents a PCR primer used to  
XX amplify a human obesity-associated biallelic marker

XX SQ Sequence 18 BP; 5 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1912 CCCATATTGCCAATAT 1927  
Db 18 CCCATATTGCCAATAT 3

RESULT 2921  
AAD40234/c  
ID AAD40234 standard; DNA; 18 BP.

XX AC AAD40234;

XX DT 22-OCT-2002 (first entry)

XX DE Cotton 3-beta hydroxylase amplifying RACE PCR primer, BOH14.

XX KW Gibberellin; transgenic plant; seed germination; seedling growth;  
XX transgenic; 3-beta hydroxylase; cotton; enzyme; RACE; primer; GA;  
XX rapid amplification of cDNA ends; ss.

XX OS Gossypium hirsutum.

XX PN US2002053095-A1.

XX PD 02-MAY-2002.

XX PF 10-AUG-1999; 99US-00371307.

XX PR 10-AUG-1999; 99US-00371307.

XX PA (BROW/) BROWN S M.

XX PI Brown SM, Elich TD, Heck GR, Kishore GM, Logusch EW, Logusch SJ;  
XX Piller KU, Rao S, Ream JE;

XX DR WPI; 2002-489107/52.

XX PT Control of gibberellin levels in plants useful to avoid unfavorable  
XX conditions in crops to increase yields, using transgenic plants having  
XX reduced seed germination and early seedling growth then treatment to  
XX restore these properties.

XX PS Example 6; Page 83; 15pp; English.

XX CC The invention relates to control of gibberellin (GA) levels in plants.  
XX The method involves producing transgenic plants having a phenotype of  
XX reduced seed germination and reduced early seedling growth, then  
XX restoring seed germination and early seedling growth by treating plants  
XX with an appropriate compound when conditions are favourable. The method  
XX is useful to control seed germination and/or early seedling growth in  
XX agricultural production so that unfavorable environmental conditions  
XX normally reducing agronomic output can be avoided and yields increased.  
XX Plants also demonstrate increased uniformity of germination, emergence  
XX and seedling vigor, so increasing yields at harvest. The method is  
XX especially useful in crop plants such as e.g. canola, soybean, cotton,  
XX etc., and is also useful in storage and transport of seeds to reduce  
XX premature germination which may affect agronomic or food quality of the  
XX seeds. The present sequence is rapid amplification of cDNA ends (RACE)  
XX PCR primer used to amplify cotton gibberellin 3-beta hydroxylase cDNA.  
XX This primer is used in exemplification of the invention

XX SQ Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2e+03; 1; Indels 0; Gaps 0;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4708 TCACAGCACCAACCA 4723  
Db 18 TCACAGCACCAACCA 3



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XX WP1; 2003-140627/13.
DR New NOVX polypeptides and nucleic acids, useful for preventing or
XX treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
PT atherosclerosis, or diabetes, and in chromosome mapping, tissue typing or
PT pharmacogenomics.
XX
XX Example 19; Page 261; 332pp; English.
XX
XX The invention describes an isolated polypeptide (I) comprising any of 27
CC 118-961 residue amino acid sequences, given in the specification, a
CC mature form of them, a sequence that is at least 95 % identical to them,
CC or a sequence having one or more conservative substitutions in them. The
CC polypeptide is useful in manufacturing a medicament for treating a
CC syndrome associated with a human disease selected from a pathology
CC associated with the polypeptide. The NOVX polypeptides, polynucleotides
CC and antibodies are useful in treating or preventing NOVX-associated
CC disorders, e.g. cardiomyopathy, atherosclerosis, cancer, diabetes, immune
CC disorders, AIDS, obesity, asthma, haematopoietic disorders, Parkinson's
CC disease, Alzheimer's disease, infections, multiple sclerosis, cancer-
CC associated cachexia, and other wasting disorders associated with chronic
CC diseases. The nucleic acids and polypeptides may also be used as targets
CC for the identification of small molecules that modulate or inhibit e.g.
CC neurogenesis, cell differentiation, cell proliferation, haematopoiesis,
CC wound healing and angiogenesis, in gene therapy, in generation of
CC antibodies that bind immunospecifically to NOVX substances for use in
CC therapeutic or diagnostic methods. The nucleic acids are further used as
CC hybridisation probes, in chromosome mapping, tissue typing, preventive
CC medicine, and pharmacogenomics. The polypeptides are also useful as
CC vaccines. This sequence represents a primer used to isolate DNA encoding
CC novel human G-protein coupled receptor related NOV proteins
XX
SQ Sequence 18 BP; 6 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 18;
XX Best Local Similarity 93.8%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1307 CATCTCCAGTGGCTG 1322
XX |||||||||||
DB 16 CATCTCCAGTGGCTG 1
XX
RESULT 2924
ABZ58095/C
ID ABZ58095 standard; DNA; 18 BP.
XX
XX ABZ58095;
XX
XX 22-APR-2003 (first entry)
XX
XX Murine tumour necrosis factor reverse PCR primer.
XX
XX Mouse; tumour necrosis factor; repressor binding element; Cheo box;
XX DNA damage; cytostatic; cancer; gene therapy; PCR; primer; ss.
XX
XX Mus sp.
XX
XX WO2003000879-A2.
XX
XX 03-JAN-2003.
XX
XX 21-JUN-2002; 2002WO-BE000105.
XX
XX 21-JUN-2001; 2001GB-00015115.
XX
XX (LEUV-) LEUVEN RES & DEV.
XX
XX Anne J, Nuyts S, Lambin P;
XX
XX WPI; 2003-184048/18.
XX

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PT New polynucleotide comprising at least one first sequence element
PT inserted in a second sequence element, useful for preparing a composition
XX for treating cancer.
XX
XX Example 5; Page 27; 49pp; English.
XX
XX The present sequence is a reverse primer for the murine tumour necrosis
CC factor (MTNF) gene. In examples from the invention, MTNF was expressed in
CC bacterial host cells under the control of egla or recA promoters (see
CC ABZ58088-89) in which Cheo box (see ABZ58043) sequences had either been
CC inserted or deleted. These provided examples of methods of the invention
CC in which a promoter which is not inducible by DNA damaging agents or
CC conditions is converted into a promoter which is inducible by radiation,
CC element such as a Cheo box, or in which a repressor binding
CC sequence is used to increase the induction level, or to decrease the
CC basal expression level, of a promoter which is inducible by genotoxic
CC compounds or conditions. The novel expression system has wide industrial
CC applications in recombinant protein production, and clinical applications
CC including the controlled expression of therapeutic compounds such as MTNF
CC in hypoxic tissues such as tumours
XX
SQ Sequence 18 BP; 8 A; 5 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 18;
XX Best Local Similarity 93.8%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2679 TCTGGAGTCATTGCTC 2694
XX |||||||||||
DB 18 TTTGGAGTCATTGCTC 3
XX
RESULT 2925
ADM06441
ID ADM06441 standard; DNA; 18 BP.
XX
XX ADM06441;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PCR primer SEQ ID NO:5126.
XX
XX Human; gene therapy; diagnostic marker; pharmaceutical; ss; PCR; primer.
XX
XX Homo sapiens.
XX
XX EP1347046-A1.
XX
XX 24-SEP-2003.
XX
XX 12-APR-2002; 2002EP-00008400.
XX
XX 22-MAR-2002; 2002JP-00137785.
XX
XX (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
XX Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
XX Seki N, Yoshikawa T, Otsuka M, Nagahari K, Maehno Y;
XX
XX WPI; 2003-723558/69.
XX
XX New polynucleotides and polypeptides are useful in gene therapy, for
XX developing a diagnostic marker or medicines for regulating their
XX expression and activity, or as a target of gene therapy.
XX
XX Example 8; SEQ ID NO 5126; 305pp; English.
XX
XX The invention relates to a novel human polynucleotide and the encoded
CC polypeptide. A polynucleotide of the invention ADM06202-ADM06773 is useful
CC therapy. An oligonucleotide of the invention ADM06202-ADM06773 is useful
CC as a primer for synthesizing the polynucleotide or as a probe for

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CC detecting the polynucleotide. The polynucleotides ADM01316-ADM03758 are  
 CC useful in gene therapy, for developing a diagnostic marker or medicines  
 CC for regulating their expression and activity, or as a target of gene  
 CC therapy. The proteins ADM03759-ADM06201 encoded by the polynucleotides  
 CC are useful as pharmaceutical agents. The present sequence represents an  
 CC oligonucleotide used in the invention.

CC Sequence 18 BP; 4 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 2e+03; Mismatches 0; Gaps 0;

Matches 15; Conservative 0; Indels 1; Gaps 0;

Qy 1213 CAGTCACATCTCTCTT 1228  
 Db 1 CAGTCACATCTCTCTT 16

RESULT 2926

ADM93953/c

ID ADM93953 standard; DNA, 18 BP.

AC ADM93953;

DT 17-JUN-2004 (first entry)

DE Human NOV protein primer #43.

XX gene therapy; vaccine; ss; primer; NOVX; cancer;

KW neurodegenerative disorder; parkinson's disease; metabolic disorder;

KW diabetes; obesity; immune related disorder; tissue typing; human.

XX Homo sapiens.

PN US2004009480-A1.

PD 15-JAN-2004.

PF 03-JUN-2002; 2002US-00162335.

PR 04-JUN-2001; 2001US-0295607P.

PR 04-JUN-2001; 2001US-0295661P.

PR 06-JUN-2001; 2001US-0296404P.

PR 06-JUN-2001; 2001US-0296418P.

PR 11-JUN-2001; 2001US-0297414P.

PR 12-JUN-2001; 2001US-0297567P.

PR 14-JUN-2001; 2001US-0298285P.

PR 15-JUN-2001; 2001US-0298556P.

PR 21-JUN-2001; 2001US-0300883P.

PR 26-JUN-2001; 2001US-0301550P.

PR 28-JUN-2001; 2001US-0311972P.

PR 27-AUG-2001; 2001US-0315069P.

PR 27-AUG-2001; 2001US-0315071P.

PR 29-AUG-2001; 2001US-0315660P.

PR 14-SEP-2001; 2001US-0322293P.

PR 17-SEP-2001; 2001US-0322706P.

PR 14-DEC-2001; 2001US-0341186P.

PR 28-FEB-2002; 2002US-0361189P.

PR 12-MAR-2002; 2002US-0363673P.

PA (LILL/) LI L.  
 PA (MACD/) MACDOUGALL J R.  
 PA (MALY/) MALYANKAR U M.  
 PA (MILL/) MILLER I.  
 PA (PADI/) PADIGARU M.  
 PA (PATI/) PATTURAJAN M.  
 PA (PENA/) PENA C E A.  
 PA (RAST/) RASTELLI L.  
 PA (SHIM/) SHIMKETS R A.  
 PA (STON/) STONE D J.  
 PA (SPYT/) SPYTEK K A.  
 PA (VERN/) VERNET C A M.  
 PA (VOSS/) VOSS E Z.  
 PA (ZERH/) ZERHUSEN B D.

XX Anderson DW, Baumgartner JC, Boldog FL, Casman SJ, Edinger SR,  
 PI Gangoli EA, Gerlach V, Gorman L, Guo XS, Hjalte T, Kekuda R, Li L,  
 PI MacDougall JR, Malyankar UM, Miller I, Padigaru M, Patturajan M,  
 PI Pena CE, Rastelli L, Shimkets RA, Stone DJ, Spytek KA, Vernet CM,  
 PI Voss EZ, Zerhusen BD;  
 DR WPI, 2004-090456/09.

XX New NOVX polypeptide, useful for preparing a composition for treating or  
 PT preventing e.g., cancer, neurodegenerative disorders such as Parkinson's  
 PT disease, or metabolic disorders such as diabetes or obesity, or for  
 PT tissue typing.

XX Example; SEQ ID NO 175; 202pp; English.

XX The invention relates to an isolated NOVX polypeptide. The polypeptide is  
 CC useful for preparing a composition for treating or preventing a pathology  
 CC associated with NOVX polypeptide e.g. cancer, neurodegenerative disorders  
 CC such as Parkinson's disease, metabolic disorders such as diabetes or  
 CC obesity or immune related disorders or for tissue typing. The present  
 CC sequence represents a human NOV protein primer.

XX Sequence 18 BP; 6 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 2e+03; Mismatches 1; Indels 0; Gaps 0;

Qy 1307 CATCTCTCAGTGCTG 1322

Db 16 CATCTCTCAGTGCTG 1

RESULT 2927

ADO44631/c

ID ADO44631 standard; DNA, 18 BP.

AC ADO44631;

DT 29-JUL-2004 (first entry)

DE Nucleotide sequence of a reverse primer, SEQ ID 30.

KW HIT23; transgenic; G protein-coupled receptor; GPCR; ophthalmological;

KW cytosolic; nephrotropic; antiinflammatory; dermatological; analgesic;

KW vulnerary; neuroprotective; PCR; primer; ss; NGF; BDNF.

XX Synthetic.

PN WO2004039972-A1.

PD 13-MAY-2004.

PF 28-OCT-2003; 2003WO-JP013781.

PR 29-OCT-2002; 2002JP-00314141.

PA (TAKE ) TAKEDA CHEM IND LTD.

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XX Kaicho Y, Watanabe T, Yasuhara Y, Mori I, Takekomi S;
XX WPI; 2004-376191/35.
XX
XX HI7213 protein, encoded DNA and transgenic animals for clarifying
XX pathological mechanism, developing therapeutic methods and screening
XX preventives or remedies for related diseases e.g. cataract, cancer, and
XX dermatitis.
XX
XX Example 15; SEQ ID NO 30; 161pp; Japanese.
XX
XX The invention relates to a non-human mammal that carries a DNA integrated
XX with a foreign HI7213 or its mutant gene, or a part of it. The non-human
XX animal is particularly a rat. Such gene shows phenotypes of e.g. cataract
XX onset, transient skin rash and proliferation-promoting activity. The
XX foreign HI7213 gene is a gene that encodes a G protein-coupled receptor
XX (GPCR) protein HI7213. The protein, its encoded DNA and constructed
XX transgenic animals are useful for clarifying pathological mechanism,
XX developing therapeutic methods and screening preventives or remedies for
XX related diseases e.g. cataract, cancer, and dermatitis. Sequences
XX ADO44630-ADO44632 represent PCR primers and TagMan probe used in the
XX course of the invention.
XX
XX Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 18;
XX Best Local Similarity 93.8%; Pred. No. 2e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1707 GCCATCCAGCTCTGC 1722
XX |||||
XX 16 GCCATCCAGCTCTGC 1
XX
XX RESULT 2928
XX ID AAV08286 standard; DNA; 19 BP.
XX AC AAV08286;
XX
XX 27-JAN-1999 (first entry)
XX
XX PCR primer ABCR-EXON49;R for ABCR coding sequence.
XX
XX ARP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;
XX Fundus Flavimaculatus; age-related macular degeneration; diagnosis;
XX PCR primer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO9837764-A1.
XX
XX 03-SEP-1998.
XX
XX 27-FEB-1998; 98WO-US003895.
XX
XX 27-FEB-1997; 97US-0039388P.
XX
XX (BAYU) BAYLOR COLLEGE MEDICINE.
XX (UTAH) UNIV JOHNS HOPKINS.
XX (UTAH) UNIV DEPT HEALTH & HUMAN SERVICES.
XX
XX Allmeers R, Anderson KL, Dean M, Leppert M, Lewis RA, Li Y,
XX Lupetti JR, Nachans J, Ratner A, Shroyer NF, Singh N, Smallwood PM,
XX Sun H;
XX WPI; 1998-495375/42.
XX
XX Retina-specific ARP-binding cassette transporter and DNA - useful for,
XX e.g. diagnosis and treatment of macular degeneration, such as in

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```

PT Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.
XX Claim 41; Page 32; 79pp; English.
XX
XX This sequence represents a PCR primer for DNA encoding the human retina
XX specific ARP binding cassette transporter (ABCR) of the invention. ABCR
XX may be used in compositions for screening agents that alters ABCR. The
XX agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-
XX related macular degeneration (MD). Primers (such as this sequence) and
XX probes for the ABCR DNA can be used in a diagnostic kit for detecting MD
XX
XX Sequence 19 BP; 3 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 4185 CTGGGTGTTCTAGACC 4200
XX |||||
XX 4 CTGGGTGTTCTAGACC 19
XX
XX RESULT 2929
XX ID AAV58050/C
XX AC AAV58050 standard; DNA; 19 BP.
XX
XX 20-NOV-1998 (first entry)
XX
XX Human BUGT-1 PCR antisense primer.
XX
XX Human; BUGT-1; PCR primer; selective immune down regulation; SDR;
XX bilirubin uridine-diphosphoglucuronate glucuronosyltransferase-1;
XX immune suppression; autoimmune disease; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO9837917-A1.
XX
XX 03-SEP-1998.
XX
XX 26-FEB-1998; 98WO-US003606.
XX
XX 28-FEB-1997; 97US-00808629.
XX
XX (ENZO-) ENZO THERAPEUTICS INC.
XX (ENZO-) ENZO BIOCHEM INC.
XX
XX Roy-Chowdhury J, Ilan Y, Rabbani E, Engelhardt DL;
XX WPI; 1998-495381/42.
XX
XX Selective immune downregulation against particular antigens of bacteria
XX or transplant materials - also for treating autoimmune disease, by oral
XX administration of antigen-containing material.
XX
XX Example 2; Page 39; 73pp; English.
XX
XX A method has been developed for producing selective immune down
XX regulation (SIDR) in a subject to an infectious bacterial agent. The
XX method comprises administering a combination of reagents that includes at
XX least one component, or fragment, of the infectious agent. The present
XX sequence represents a PCR primer for human bilirubin uridine-
XX diphosphoglucuronate glucuronosyltransferase-1 (BUGT-1) gene used in an
XX example from the present invention. SDR is established against
XX Streptococcus in cases of rheumatic fever or glomerular nephritis and the
XX transplant process is used to prevent guest vs. host disease. More
XX generally SIDR may be directed (1) against a gene delivery vector and/or
XX its expression product; (11) against a wide range of bacteria, viruses
XX and fungi (including human immune deficiency virus and hepatitis B and C
XX viruses) where the immune response is an important part of the disease

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process; (iii) to induce immunological tolerance (in cases of autoimmune diseases) and (iv) for immune suppression, i.e. to modulate, specifically suppress any unwanted immune response. Establishing SDR allows a patient to retain immune competence against all but selected antigens, i.e. it avoids the risks associated with generalised immune suppression. When used in conjunction with gene therapy vectors, SDR lengthens the period of transient expression

Sequence 19 BP; 5 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03; Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 180 CTGCTGCTGCTGCTG 195  
 Db 16 CTGCTGCTGCTGCTG 1

RESULT 2930

AAZ58146/c

ID AAZ58146 standard; DNA; 19 BP.

XX AAZ58146;

XX 25-APR-2000 (first entry)

XX Human FAST-1 gene PCR primer NT2-8.

XX FAST-1; hPAST-1; human; forkhead activin signal transducer;

KM signal transduction; tumour-derived growth factor-beta; TGF-beta;

KW activin; tumour; therapy; PCR primer; ss.

XX Homo sapiens.

OS WO200002910-A2.

PN 20-JAN-2000.

PD 18-JUN-1999; 99WO-US013764.

XX 10-JUL-1998; 98US-00113309.

XX (UYJO ) UNIV JOHNS HOPKINS.

XX Zhou S, Zavel L, Vogelstein B, Kinzler KW;

PI WPI, 2000-160897/14.

XX Novel human forkhead activin signal transducer gene and polypeptides, used for screening for compounds which modulate the action of TGFbeta.

XX Example 2; Page 19; 47pp; English.

XX The present sequence is that of primer NT2-8 which was used in the PCR amplification of human PAST-1 (hPAST-1) sequences. The primer pair (see also AAZ58145) span an intron and thereby allow discrimination of MRNA-derived PCR products from those derived from genomic DNA or unprocessed RNA. The hPAST-1 gene (see Z581144) appeared to be expressed in all CC normal human tissues tested, including those of breast, colon, thymus and muscle, as well as in several cancer cell lines. hPAST-1 protein (see AAY5873) mediates transcriptional responses to tumour-derived growth factor-beta (TGF-beta) and activin in a ligand-, receptor- and Smad-dependent fashion. The invention includes tools for investigating the CC-beta signalling pathway and screening for compounds which modulate the CC action of TGF-beta. Such compounds can be used to modify or regulate CC transcriptional activation associated with the TGF-beta signalling CC pathway, and can be applied therapeutically to alter the growth of tumour cells, or to alter normal or abnormal developmental responses

XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03; Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1191 CTGAGAGCCTTCAGTG 1206  
 Db 16 CTGAGAGCCTTCAGTG 1

RESULT 2931

AA85360/c

ID AA85360 standard; DNA; 19 BP.

XX AA85360;

XX 04-DEC-2000 (first entry)

XX Cyclin H ribozyme binding site #159.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

XX Mammalia.

OS WO200032765-A2.

PN 08-JUN-2000.

PD 06-DEC-1999; 99WO-US028772.

XX 04-DEC-1998; 98US-0110954P.

XX (IMMU-) IMMUSOL INC.

XX T-titz R, Welch PJ, Barber JR, Robbins JM;

PI WPI, 2000-412314/35.

XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.

XX Disclosure; Page 91; 109pp; English.

XX The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. CC Representative examples of ribozyme recognition sites are given in CC AA8215 to AA86787. The ribozyme of the invention is useful for CC inhibiting restenosis by introduction of the ribozyme into cells. The CC ribozyme is resistant to endonuclease activity and hence is efficient in CC restenosis treatment

XX Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03; Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2831 GAACACCACTTCTTC 2846  
 Db 17 GAACACCACTTCTTC 2

RESULT 2932

AA85675/c

ID AA85675 standard; DNA; 19 BP.

XX AA85675;

XX 04-DEC-2000 (first entry)

XX Cyclin B1 ribozyme binding site #4.

XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.



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XX OS Mammalia.
XX PN WO200032765-A2.
XX PD 08-JUN-2000.
XX PF 06-DEC-1999; 99WO-US028772.
XX PR 04-DEC-1998; 98US-0110954P.
XX PA (IMMU-) IMMUSOL INC.
XX PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX DR WPI, 2000-412314/35.
XX PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PT PCNA and Cyclin B1.
XX PS Disclosure; Page 96; 109pp; English.
XX CC The present invention relates to a hairpin or hammerhead ribozyme,
XX CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX CC Representative examples of ribozyme recognition sites are given in
XX CC AA82415 to AA86787. The ribozyme of the invention is useful for
XX CC inhibiting restenosis by introduction of the ribozyme into cells. The
XX CC ribozyme is resistant to endonuclease activity and hence is efficient in
XX CC restenosis treatment
XX SQ Sequence 19 BP; 0 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.1e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 53 GGAGCCGCCGACCA 68
Db 17 GGAGCCGCCGACCA 2
RESULT 2933
AAZ72484/C
ID AAZ72484 standard; DNA; 19 BP.
XX AC AAZ72484;
XX DT 10-SEP-2001 (first entry)
XX DE Human biallelic marker upstream amplification primer SEQ ID NO:6840.
XX KW Human genome; biallelic marker; high density disequilibrium map;
XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KW haplotyping; hybridisation; identification; characterisation;
XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KW diagnosis; ss.
XX OS Homo sapiens.
XX PN WO9954500-A2.
XX PD 28-OCT-1999.
XX PF 21-APR-1999; 99WO-IB000822.
XX PR 21-APR-1998; 98US-0082614P.
XX PR 23-NOV-1998; 98US-0109732P.
XX PA (GEST ) GENSET.
XX PI Cohen D, Blumenfeld M, Chumakov I;

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XX XX WPI; 2000-013267/01.
XX DR Novel biallelic markers used to construct a high density disequilibrium
XX PT map of the human genome.
XX PT Claim 9; Page 1689; 2745pp; English.
XX PS AA6554 to AA69578 represent human biallelic markers from the present
XX CC invention, which contain a polymorphic base at position 24 of their
XX CC nucleotide sequences. AA69579 to AAZ77440 represent amplification
XX CC primers for the biallelic markers. The biallelic markers of the invention
XX CC have a variety of uses: they can be used for high density mapping of the
XX CC human genome, and in complex association studies and haplotyping studies
XX CC which are useful in determining the genetic basis for disease states.
XX CC Compositions and methods of the invention can also be useful for the
XX CC identification of the targets for the development of pharmaceutical
XX CC agents and diagnostic methods, as well as the characterisation of the
XX CC differential efficacious responses to and side effects from
XX CC pharmaceutical agents acting on a disease as well as other treatment.
XX CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX CC 3367, are not actually given a sequence in the Sequence Listing from the
XX CC present invention
XX SQ Sequence 19 BP; 6 A; 9 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.1%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.1e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 2284 TGTACTGGGTTAATGG 2299
Db 16 TGTACTGGGTTAATGG 1
RESULT 2934
AAZ72367/C
ID AAZ72367 standard; DNA; 19 BP.
XX AC AAZ72367;
XX DT 23-APR-2001 (first entry)
XX DE PCR primer specific for IFNA2 gene SEQ ID 51.
XX KW Human; keratinocyte derived interferon; KDI; viral infection; lymphoma;
XX KW immune system related disorder; cancer; multiple sclerosis; AIDS;
XX KW hepatitis; Cryptosporidium parvum infection; leukaemia; arthritis;
XX KW diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.
XX OS Synthetic.
XX PN WO200107608-A1.
XX PD 01-FEB-2001.
XX PF 20-JAN-2000; 2000WO-US001239.
XX PR 21-JUL-1999; 99US-00358587.
XX PR 21-JUL-1999; 99WO-US016424.
XX PA (HUMA-) HUMAN GENOME SCL INC.
XX PI Ruben SM, Moore PA, Lafleur DW;
XX DR WPI; 2001-138557/14.
XX PT Isolated keratinocyte derived interferon protein and polynucleotide used
XX PT to prevent, treat or ameliorate an immune system-related disorder, viral
XX PT infection, viral exposure and cancer.
XX PS Example 5; Page 187; 303pp; English.

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CC This invention relates to human polynucleotide sequence AAF72333 which  
 CC encodes keratinocyte derived interferon (KDI) protein AAB49774, which is  
 CC a member of the interferon family. AAF72338 represents the codon  
 CC optimized sequence of KDI. The human KDI gene is located on chromosome 9.  
 CC The specification includes KDI related protein sequences AAB49775 -  
 CC AAB49789. Also given in the specification are primer, probe and  
 CC polynucleotide sequences represented by AAF72334-AAF72370 (excluding  
 CC AAF72338) which are used in the isolation and characterization of the KDI  
 CC sequence of the invention. The KDI polypeptide is used to treat viral  
 CC infections and the protein and polynucleotide may be used to prevent,  
 CC treat or ameliorate a medical condition such as immune system-related  
 CC disorder, viral infection, viral exposure and cancer in a mammal.  
 CC Specific disorders which can be treated by KDI include multiple  
 CC sclerosis, lymphoma, acquired immune deficiency syndrome, viral  
 CC hepatitis, cryptosporidium parvum infection, chronic myelogenous  
 CC leukaemia, arthritis, diabetes and allergies

SO Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2926 TCAGCTGCTCAGTGG 2941  
 Db 19 TCAGCTGCTCTGTGG 4

RESULT 2935  
 AAH50373  
 ID AAH50373 standard; DNA, 19 BP.  
 XX  
 AC AAH50373;  
 XX  
 DT 22-AUG-2001 (first entry)  
 XX  
 DE Bacterial 23S/5S RNA detecting primer SEQ ID 568.  
 XX  
 KW Detection; spacer; 23S rDNA; 5S rDNA; probe; primer; phylogenetic group;  
 KW enterobacterium; clinical diagnosis; food contamination; ss.  
 XX  
 OS Salmomella typhi.  
 XX  
 DE19945916-A1.  
 XX  
 PD 05-APR-2001.  
 XX  
 PF 24-SEP-1999; 99DE-01045916.  
 XX  
 PR 24-SEP-1999; 99DE-01045916.  
 XX  
 PA (BIOT-) BIOTECON DIAGNOSTICS GMBH.  
 XX  
 PI Grabowski R, Berghof K;  
 XX  
 WP1; 2001-246133/26.  
 XX  
 PT New nucleic acid primers and probes, useful for bacterial detection, in  
 PT clinical diagnosis and detecting food contamination, comprises 23S and 5S  
 PT rDNA sequences.  
 XX  
 PS Example 5; Page 27; 140pp; German.  
 CC  
 CC This invention describes a novel nucleic acid molecule (I), useful as a  
 CC probe and/or primer for detecting bacteria. The invention also describes  
 CC (1) a combination of at least two nucleic acids (II) for detecting  
 CC bacteria or phylogenetic groups of bacteria, particularly enterobacteria;  
 CC (2) a kit containing (I) or the combination of (II); (3) detecting  
 CC bacteria (particularly enterobacteria) in a sample by contacting the  
 CC sample with (I) or the combination of (II) and detecting hybridization;  
 CC and (4) amplifying (MI) bacterial DNA from many different taxonomic  
 CC groups using (I) or the combination of (II) as primers. The method is  
 CC used to detect and identify bacteria, for clinical diagnosis and for

CC detecting contamination of food. (II) can detect bacteria at various  
 CC levels of selectivity (e.g., all bacteria, particular classes, families,  
 CC genera or species). The method exploits the fact that the 23S and 5S rDNA  
 CC regions, and the intermediate transcribed spacer, contain some sequences  
 CC that are highly conserved and others that are highly variable. AAH49807-  
 CC AAH50411 represent primers used to illustrate the method of the invention  
 CC

SO Sequence 19 BP; 11 A; 1 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4549 AAAAGAAACAGCATTT 4564  
 Db 4 AAAAGAAACAGCATTT 19

RESULT 2936  
 AAH60837/C  
 ID AAH60837 standard; DNA, 19 BP.  
 XX  
 AC AAH60837;  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 DE Cyclin B1 ribozyme binding site SEQ ID NO:3261.  
 XX  
 KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytosclatic;  
 KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; vitruclide;  
 KW antitickling; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO200130362-A2.  
 XX  
 PD 03-MAY-2001.  
 XX  
 PF 26-OCT-2000; 2000MO-US029500.  
 XX  
 PR 26-OCT-1999; 99US-0161532P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 PI Robbins JM, Tritz R;  
 XX  
 WP1; 2001-300427/31.  
 XX  
 PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX  
 PS Example 1; Page 309; 408pp; English.  
 CC  
 CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antipsoriatic,  
 CC dermatological, cytosclatic, antiseborrheic, antidiabetic, antitickling,  
 CC ophthalmological, vulnery, keratolytic and vitruclide activities, and  
 CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin

CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention

CC Sequence 19 BP; 0 A; 5 C; 9 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 53 GGAGCCCGCCGACCA 68  
 Db 17 GGAGCCCGACGACCA 2

RESULT 2937  
 AAH60522/c  
 ID AAH60522 standard; DNA; 19 BP.  
 AC AAH60522;  
 XX  
 DT 10-SEP-2001 (first entry)  
 XX  
 DE Cyclin H ribozyme binding site SEQ ID NO:2946.  
 XX  
 KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;  
 KW recognition site; target; ribozyme binding site; eye disease; vulnery;  
 KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;  
 KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;  
 KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;  
 KW antiproliferative; dermatological; anti-seborrheic; antidiabetic; vituicide;  
 KW antiscikling; ophthalmological; keratolytic; gene therapy; viral wart;  
 KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;  
 KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;  
 KW sickle cell retinopathy; ss.  
 KW  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO2001.30362-A2.  
 XX  
 PD 03-MAY-2001.  
 XX  
 PF 26-OCT-2000; 2000WO-US029500.  
 XX  
 PR 26-OCT-1999; 99US-0161532P.  
 XX  
 PA (IMMU-) IMMUSOL INC.  
 XX  
 PI Robbins JM, Tritz R;  
 XX  
 DR WPI; 2001-300427/31.  
 XX  
 PT Treating proliferative skin or eye diseases and scarring, using ribozymes  
 PT that cleave RNA encoding cytokines involved in inflammation, matrix  
 PT metalloproteinases, growth factors and cell-cycle dependent kinases.  
 XX  
 PS Example 1; Page 286; 408pp; English.  
 XX  
 CC The present invention describes a method for treating a proliferative  
 CC skin or eye disease and scarring. The method involves administering a  
 CC ribozyme (I) which cleaves RNA encoding a cytokine involved in  
 CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle  
 CC dependent kinase, growth factor or a reductase, or administering a  
 CC nucleic acid molecule (II) comprising a promoter operably linked to a  
 CC nucleic acid segment encoding (I). (I) can have antiseborrheic,  
 CC dermatological, cytostatic, anti-seborrheic, antidiabetic, antiscikling,  
 CC ophthalmological, vulnery, keratolytic and vituicide activities, and

CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used  
 CC in gene therapy. (I) and (II) are useful for treating proliferative skin  
 CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,  
 CC squamous or basal cell carcinoma and viral or seborrheic wart. They can  
 CC also be used for treating proliferative eye diseases such as diabetic  
 CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of  
 CC prematurity and retinal detachment, and for treating and preventing  
 CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn  
 CC scar. AAH57577 to AAH62099 represent sequences used in the  
 CC exemplification of the present invention

CC Sequence 19 BP; 4 A; 2 C; 6 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2831 GAACACCACTTCTTC 2846  
 Db 17 GAACAGCACTTCTTC 2

RESULT 2938  
 ABK48789/c  
 ID ABK48789 standard; DNA; 19 BP.  
 XX  
 AC ABK48789;  
 XX  
 DT 15-JUL-2002 (first entry)  
 XX  
 DE Human DNA sequence #3 relating to method for selective DNA isolation.  
 XX  
 KW Human; selective DNA isolation; heterohybrid DNA; DAM methylase;  
 KW DNA methylation; homohybrid DNA; gene isolation; de.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US6372434-B1.  
 XX  
 PD 16-APR-2002.  
 XX  
 PF 01-MAY-2000; 2000US-00562332.  
 XX  
 PR 18-SEP-1998; 98US-0100999P.  
 XX  
 PR 17-SEP-1999; 99US-00398217.  
 XX  
 PA (MOLE-) MOLECULAR STAGING INC.  
 XX  
 PI Weissman S, Lasken R, Pan X;  
 XX  
 DR WPI; 2002-350565/38.  
 XX  
 PT Selectively recovering heterohybrid DNA from a reannealed mixture of two  
 PT DNA samples, useful for screening complex DNA samples, involves  
 PT methylating both strands of a first sample.  
 XX  
 PS Disclosure; Col 15; 16pp; English.  
 XX  
 CC The present invention relates to a method of selectively recovering  
 CC heterohybrid DNA from a reannealed mixture of two DNA samples. The method  
 CC comprises methylating both strands of the first sample but not the second  
 CC sample with DAM methylase, and methylating both samples with methylase  
 CC that protects all restriction sites recognised and cleaved by a  
 CC restriction enzyme against cleavage. The heterohybrid DNA has one strand  
 CC derived from a second sample. The method involves the use of Y-shaped  
 CC adapters having a region of non-complementary single-stranded DNA at the  
 CC ends. The method can also be used for homohybrid DNA containing DNA  
 CC strands from the same sample. The method is useful for selectively  
 CC recovering heterohybrid and homohybrid DNA from a reannealed mixture of  
 CC two DNA samples. The method is useful for screening complex DNA  
 CC preparations and for isolation of genes without requiring prior knowledge  
 CC of their biochemical function or map position. The present sequence  
 CC represents a human DNA sequence of unknown function. Note: The present

CC sequence is given as Seq ID No. 6 in the sequence listing but is not  
CC mentioned elsewhere in the specification

XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1191 CTGAGAGGCTCAGTG 1206

Db 16 CTGAGAGGCTCAGTG 1

RESULT 2939

ABK94014/c

ID ABK94014 standard; DNA; 19 BP.

XX ABK94014;

XX 27-AUG-2002 (first entry)

XX Endothelin receptor B (EDNRB) gene fragment PCR primer #2.

XX Endothelin; EDN; endothelin converting enzyme; ECE; endothelin receptor;

XX EDNR; signaling system; cardiovascular disease; coronary heart disease;

XX hypertension; atherosclerosis; angiogenesis; fatty acid metabolism;

XX diabetes; familial hypercholesterolemia; forensic marker;

XX transgenic animal; solid support; cardiovascular regulator; PCR; primer;

XX ss.

XX Synthetic.

XX WO200224747-A2.

XX 28-MAR-2002.

XX 31-AUG-2001; 2001WO-EP010087.

XX 19-SEP-2000; 2000EP-00120123.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Brinkmann U, Hoffmeyer S;

XX WPI; 2002-435060/46.

XX Novel polynucleotide of the endothelin/endothelin converting

XX enzyme/receptors of endothelin and endothelin converting enzyme signaling

XX system associated with cardiovascular disease, useful for treating the

XX disease.

XX Example 6; Page 51; 190pp; English.

XX The invention describes a polynucleotide (I) of the endothelin

XX (EDN)/endothelin converting enzyme (ECE)/receptors of EDN and ECE (EDNR)

XX signaling system which is associated with a cardiovascular disease. (I),

XX the gene encoding EDN, ECE or EDNR (II) or a vector (III) expressing (I)

XX or (II) is useful for producing cells capable of expressing a molecular

XX variant polypeptide which is associated with a cardiovascular disease.

XX (II), (III), the EDN, ECE or EDNR polypeptide, or a cell expressing a

XX molecular variant gene comprising (I) is useful for identifying and

XX obtaining a pro-drug or drug capable of modulating the activity of a

XX molecular variant of a polypeptide of the EDN/EDNR/ECE signaling system

XX or its gene product, or for identifying and obtaining an inhibitor of the

XX activity of a molecular variant of a polypeptide of the EDN/EDNR/ECE

XX signaling system or its gene product. The isolated proteins and

XX polynucleotides encoding them are useful for preparation of a

XX pharmaceutical composition for treating a cardiovascular disease such as

XX coronary heart disease, hypertension, atherosclerosis, or related to

XX abnormal angiogenesis or fatty acid metabolism e.g. diabetes and familial

XX hypercholesterolemia. The gene or a polynucleotide fragment of the

XX EBN/ECE/EDNR signaling system are useful as forensic markers, for

CC creating a transgenic animal and in creation of a solid support

CC comprising polynucleotides, genes, vectors, polypeptides, antibodies or

CC host cells of the invention. This sequence represents a PCR primer used

CC to isolate a cardiovascular regulator polynucleotide from DNA encoding

CC members of the EDN/ECE/EDNR signaling pathway

XX Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2569 GAGAGGCTCAGGAA 2584

Db 16 GAGAGGCTCAGGAA 1

RESULT 2940

ABX1035/c

ID ABX1035 standard; DNA; 19 BP.

XX ABX1035;

XX 17-APR-2003 (first entry)

XX Human IFN $\alpha$ 2 specific PCR primer #2 used in quantitative PCR reaction.

XX Human, keratinocyte derived interferon; KDI; immune system disorder;

XX inflammation; cancer; blood disorder; cardiovascular disorder;

XX cerebrovascular disease; wound; neurological disease; viral infection;

XX bacterial infection; blood vessel growth inhibition; immunomodulatory;

XX antiinflammatory; vasotropic; haemostatic; cardiac; vulnary;

XX cerebroprotective; neuroprotective; antibacterial; virucide;

XX antiarteriosclerotic; cytosstatic; quantitative PCR; qPCR; IFN $\alpha$ 2; primer;

XX ss.

XX Homo sapiens.

XX US6472512-B1.

XX 29-OCT-2002.

XX 20-JUL-2001; 2001US-00908594.

XX 21-JUL-1998; 98US-0093643P.

XX 21-JUL-1999; 99US-00358587.

XX 21-JUL-1999; 99WO-US016424.

XX 20-JAN-2000; 2000US-00487792.

XX 20-JAN-2000; 2000WO-US001239.

XX 21-JUL-2000; 2000US-0219621P.

XX 24-MAY-2001; 2001US-0292934P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Lafleur DW, Moore PA, Ruben SM;

XX WPI; 2003-227870/22.

XX New isolated antibody that binds a keratinocyte derived interferon (KDI)

XX protein, for the diagnosis, prevention and treatment of disorders with

XX aberrant expression of the KDI protein, such as disorders of the immune

XX system.

XX Example 5; Col 166; 147pp; English.

XX The present invention relates to the isolation of human keratinocyte

XX derived interferon (KDI) protein, and the polynucleotide sequences

XX encoding it. The gene encoding human KDI maps to chromosome 9. The novel

XX KDI protein is a member of the interferon family. The invention also

XX describes vectors, host cells, and recombinant methods for producing the

XX KDI protein. The invention also discloses methods for identifying

XX agonists and antagonists of KDI activity. An antibody that binds to the

XX KDI protein, the KDI polypeptide sequence, and the polynucleotide

CC sequence encoding KDI are useful in the diagnosis, prevention and  
CC treatment of disorders associated with the aberrant expression of the KDI  
CC protein, such as disorders of the immune system, inflammation, cancer,  
CC blood disorders, cardiovascular disorders, cerebrovascular diseases,  
CC wounds, neurological diseases, bacterial or viral infections and blood  
CC vessel growth inhibition. The present sequence represents a PCR primer  
CC used in a quantitative PCR (QPCR) reaction in the examples of the present  
CC invention

CC Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2926 TCAAGCTGCTCAGTGG 2941

DB 19 TCAAGCTGCTCAGTGG 4

RESULT 2941

ACA98888/c

ID ACA98888 standard; DNA; 19 BP.

XX ACA98888;

XX 28-JUL-2003 (first entry)

XX Human CYP2C8 SNP detection PCR primer #328.

XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;

XX cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;

XX single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

XX Homo sapiens.

XX MO200299099-A2.

XX 12-DEC-2002.

XX 31-MAY-2002; 2002WO-EP006000.

XX 01-JUN-2001; 2001EP-00112899.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Penger A, Sprenger R, Brinkmann U;

XX WPI; 2003-167344/16.

XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide

XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.

XX arachidonic acid metabolism, cancer or cardiovascular diseases.

XX Example 2; Page 52; 178pp; English.

XX The invention describes a new polynucleotide comprising a polynucleotide:

XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined

XX in the specification; (b) encoding any of seven polypeptides having 7

XX amino acids, or a polypeptide with 3 amino acids; (c) capable of

XX hybridizing to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)

XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The

XX polynucleotide, gene, vector, polypeptide or antibody is useful for

XX diagnosing or treating a disease, or for preparing a pharmaceutical composition

XX for treating a disease, or for preparing a pharmaceutical composition

XX metabolism, cancer or cardiovascular diseases. This sequence represents a

XX primer used to isolate regions of the human cytochrome P450 polypeptide

XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism

XX (SNP) in that region of different individuals useful in disease diagnosis

QY 3480 AGAAAAATCAAGGTG 3495

DB 16 AGAAAAATCAAGGTG 1

RESULT 2942

ACA98885

ID ACA98885 standard; DNA; 19 BP.

XX ACA98885;

XX 28-JUL-2003 (first entry)

XX Human CYP2C8 SNP detection PCR primer #325.

XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;

XX cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;

XX single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

XX Homo sapiens.

XX MO200299099-A2.

XX 12-DEC-2002.

XX 31-MAY-2002; 2002WO-EP006000.

XX 01-JUN-2001; 2001EP-00112899.

XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

XX Penger A, Sprenger R, Brinkmann U;

XX WPI; 2003-167344/16.

XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide

XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.

XX arachidonic acid metabolism, cancer or cardiovascular diseases.

XX Example 2; Page 52; 178pp; English.

XX The invention describes a new polynucleotide comprising a polynucleotide:

XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined

XX in the specification; (b) encoding any of seven polypeptides having 7

XX amino acids, or a polypeptide with 3 amino acids; (c) capable of

XX hybridizing to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)

XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The

XX polynucleotide, gene, vector, polypeptide or antibody is useful for

XX diagnosing or treating a disease, or for preparing a pharmaceutical composition

XX for treating a disease, or for preparing a pharmaceutical composition

XX metabolism, cancer or cardiovascular diseases. This sequence represents a

XX primer used to isolate regions of the human cytochrome P450 polypeptide

XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism

XX (SNP) in that region of different individuals useful in disease diagnosis

QY 3480 AGAAAAATCAAGGTG 3495

DB 4 AGAAAAATCAAGGTG 19

RESULT 2943

ADP36170/c

ID ADF36170 standard; RNA; 19 BP.  
 AC ADF36170;  
 XX  
 DT 12-FEB-2004 (first entry)  
 DE Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:459.  
 XX  
 XX double-stranded short interfering nucleic acid;  
 KM short interfering nucleic acid; siNA; downregulation;  
 KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;  
 KM cyrostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;  
 KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;  
 KM diabetic retinopathy; macular degeneration; neovascular glaucoma;  
 KM arthritis; psoriasis; endometriosis; angiofibroma;  
 KM polycystic kidney disease; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO2003070910-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 20-FEB-2003; 2003WO-US005022.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 29-MAY-2002; 2002WO-US017674.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 03-JUL-2002; 2002US-0393796P.  
 PR 29-JUL-2002; 2002US-039348P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 04-NOV-2002; 2002US-00287949.  
 PR 27-NOV-2002; 2002US-00306747.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L, Pavco P;  
 XX  
 DR WPI; 2003-679876/64.  
 XX  
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of cancer, downregulates the vascular endothelial growth  
 PT factor receptor gene.  
 XX  
 PS Example 3, SEQ ID NO 459; 207pp; English.  
 XX  
 XX The present invention describes a double-stranded short interfering  
 CC nucleic acid (siNA) that downregulates expression of the vascular  
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a  
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo  
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors  
 CC that express siNA; and (5) single-stranded siNA with similar properties.  
 CC The siNAs have antiangiogenic, cyrostatic, antidiabetic,  
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and  
 CC gynaecological activities. The siNA are useful for modulating  
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially  
 CC useful for treating a wide range of angiogenesis-associated conditions,  
 CC particularly cancers, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,  
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,  
 CC drug screening, target identification and validation, genetic  
 CC engineering, studying gene function, and also for gene mapping (e.g. of  
 CC single-nucleotide polymorphisms). The present sequence is used in the  
 CC exemplification of the present invention.  
 CC  
 CC Sequence 19 BP; 6 A; 2 C; 5 G; 0 T; 6 U; 0 Other;  
 XX  
 XX  
 SQ Query Match 0.1%; Score 14.4; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2659 TACAGTGCMAATATC 2674  
 DB 16 TACAGCTCCAAATATC 1  
 RESULT 2944  
 ADF36750  
 ID ADF36750 standard; RNA; 19 BP.  
 XX  
 AC ADF36750;  
 XX  
 DT 12-FEB-2004 (first entry)  
 DE Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1039.  
 XX  
 XX double-stranded short interfering nucleic acid;  
 KM short interfering nucleic acid; siNA; downregulation;  
 KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;  
 KM cyrostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;  
 KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;  
 KM diabetic retinopathy; macular degeneration; neovascular glaucoma;  
 KM arthritis; psoriasis; endometriosis; angiofibroma;  
 KM polycystic kidney disease; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 PN WO2003070910-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 20-FEB-2003; 2003WO-US005022.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 29-MAY-2002; 2002WO-US017674.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 03-JUL-2002; 2002US-0393796P.  
 PR 29-JUL-2002; 2002US-039348P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 04-NOV-2002; 2002US-00287949.  
 PR 27-NOV-2002; 2002US-00306747.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L, Pavco P;  
 XX  
 DR WPI; 2003-679876/64.  
 XX  
 PT New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of cancer, downregulates the vascular endothelial growth  
 PT factor receptor gene.  
 XX  
 PS Example 3, SEQ ID NO 1039; 207pp; English.  
 XX  
 XX The present invention describes a double-stranded short interfering  
 CC nucleic acid (siNA) that downregulates expression of the vascular  
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a  
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo  
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors  
 CC that express siNA; and (5) single-stranded siNA with similar properties.  
 CC The siNAs have antiangiogenic, cyrostatic, antidiabetic,  
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and  
 CC gynaecological activities. The siNA are useful for modulating  
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially  
 CC useful for treating a wide range of angiogenesis-associated conditions,  
 CC particularly cancers, diabetic retinopathy, macular degeneration,

CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,  
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,  
 CC drug screening, target identification and validation, genetic  
 CC engineering, studying gene function, and also for gene mapping (e.g. of  
 CC single-nucleotide polymorphisms). The present sequence is used in the  
 CC exemplification of the present invention.

XX Sequence 19 BP; 4 A; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 62.5%; Pred. No. 2.1e+03;  
 Matches 10; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

OY 3581 CTCATCTGCTACAGCT 3596  
 Db 4 CUCAUCUGUACAGCU 19

RESULT 2945

ADP37074/C

ID ADF37074 standard; RNA; 19 BP.

AC ADF37074;

DT 12-FEB-2004 (first entry)

DE Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1363.

XX double-stranded short interfering nucleic acid;

KM short interfering nucleic acid; siNA; downregulation;

KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;

KM cytosolic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;

KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;

KM diabetic retinopathy; macular degeneration; neovascular glaucoma;

KM arthritis; psoriasis; endometriosis; angiofibroma;

KM polycystic kidney disease; ss.

XX Synthetic.

OS Homo sapiens.

PN WO2003070910-A2.

PD 28-AUG-2003.

PF 20-FEB-2003; 2003WO-US005022.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 29-MAY-2002; 2002WO-US017674.

PR 06-JUN-2002; 2002US-0386782P.

PR 03-JUL-2002; 2002US-0393796P.

PR 29-JUL-2002; 2002US-0393796P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 04-NOV-2002; 2002US-00287949.

PR 27-NOV-2002; 2002US-00306747.

PR 15-JAN-2003; 2003US-0440129P.

PA (RIBO-) RIBOZYME PHARM INC.

PI Mcswiggen J, Beigelman L, Pavco P;

DR WPI; 2003-679876/64.

XX New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of cancer, downregulates the vascular endothelial growth  
 PT factor receptor gene.

XX Example 3; SEQ ID NO 1363; 207pp; English.

CC The present invention describes a double-stranded short interfering  
 CC nucleic acid (siNA) that downregulates expression of the vascular

CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a  
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo  
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors  
 CC that express siNA; and (5) single-stranded siNA with similar properties.

XX The siNAs have antiangiogenic, cytosolic, antidiabetic,  
 CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and  
 CC gynaecological activities. The siNA are useful for modulating and  
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially  
 CC useful for treating a wide range of angiogenesis-associated conditions,  
 CC particularly cancers, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,  
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,  
 CC drug screening, target identification and validation, genetic  
 CC engineering, studying gene function, and also for gene mapping (e.g. of  
 CC single-nucleotide polymorphisms). The present sequence is used in the  
 CC exemplification of the present invention.

XX Sequence 19 BP; 7 A; 2 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3581 CTCATCTGCTACAGCT 3596  
 Db 16 CTCATCTGTACAGCT 1

RESULT 2946

ADP35743

ID ADF35743 standard; RNA; 19 BP.

AC ADF35743;

DT 12-FEB-2004 (first entry)

DE Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:32.

XX double-stranded short interfering nucleic acid;

KM short interfering nucleic acid; siNA; downregulation;

KM vascular endothelial growth factor receptor; VEGFR; antiangiogenic;

KM cytosolic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;

KM nephrotropic; gynaecological; angiogenesis-associated condition; cancer;

KM diabetic retinopathy; macular degeneration; neovascular glaucoma;

KM arthritis; psoriasis; endometriosis; angiofibroma;

KM polycystic kidney disease; ss.

XX Synthetic.

OS Homo sapiens.

PN WO2003070910-A2.

PD 28-AUG-2003.

PF 20-FEB-2003; 2003WO-US005022.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 29-MAY-2002; 2002WO-US017674.

PR 06-JUN-2002; 2002US-0386782P.

PR 03-JUL-2002; 2002US-0393796P.

PR 29-JUL-2002; 2002US-0393796P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 04-NOV-2002; 2002US-00287949.

PR 27-NOV-2002; 2002US-00306747.

PR 15-JAN-2003; 2003US-0440129P.

PA (RIBO-) RIBOZYME PHARM INC.

PI Mcswiggen J, Beigelman L, Pavco P;

DR WPI; 2003-679876/64.

XX New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of cancer, downregulates the vascular endothelial growth  
 PT factor receptor gene.

XX Example 3; SEQ ID NO 1363; 207pp; English.

CC The present invention describes a double-stranded short interfering  
 CC nucleic acid (siNA) that downregulates expression of the vascular

DR WPI; 2003-679876/64.  
 XX  
 XX New double-stranded interfering nucleic acid, useful e.g. for treatment  
 PT and diagnosis of cancer, downregulates the vascular endothelial growth  
 PT factor receptor gene.  
 PS  
 XX Example 3; SEQ ID NO 32; 207bp; English.  
 XX  
 CC The present invention describes a double-stranded short interfering  
 CC nucleic acid (siNA) that downregulates expression of the vascular  
 CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a  
 CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo  
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors  
 CC that express siNA; and (5) single-stranded siNA with similar properties.  
 CC The siNAs have antiangiogenic, cytostatic, antidiabetic, and  
 CC ophthalmological, antiarthritic, antipsoriatic, nephroprotective and  
 CC gynaecological activities. The siNA are useful for modulating  
 CC (downregulating) the expression of VEGFR genes. The siNA are potentially  
 CC useful for treating a wide range of angiogenesis-associated conditions,  
 CC particularly cancers, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiodioma,  
 CC and polycystic kidney disease. The siNA may also be useful for diagnosis,  
 CC drug screening, target identification and validation, genetic  
 CC engineering, studying gene function, and also for gene mapping (e.g. of  
 CC single-nucleotide polymorphisms). The present sequence is used in the  
 CC exemplification of the present invention.  
 CC  
 XX Sequence 19 BP; 6 A; 5 C; 2 G; 0 T; 6 U; 0 Other;  
 XX  
 SQ  
 Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 68.8%; Pred. No. 2.1e+03;  
 Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;  
 QY  
 2659 TACAGTTCACAAATATC 2674  
 :|||:|||||:|  
 4 UACAGCUGCAAAUAVUC 19  
 DB  
 RESULT 2947  
 ADF75611/c  
 ID ADF75611 standard; RNA; 19 BP.  
 XX  
 AC ADF75611;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Sense siNA that down regulates human PTP-1B expression (SeqID 152).  
 XX  
 KW human; ss; siRNA; short interfering nucleic acid; siNA;  
 KW protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;  
 KW micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;  
 KW obesity; insulin resistance; diabetes; anorectic; antidiabetic.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2003070881-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004123.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 26-JUL-2002; 2002US-00206705.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Mcswigen J, Beigelman L, Usman N;  
 PI

XX WPI; 2003-697604/66.  
 DR  
 XX  
 XX New short interfering nucleic acid, useful e.g. for treatment and  
 PT diagnosis of obesity, downregulates expression of a protein tyrosine  
 PT phosphatase-1B gene.  
 PS  
 XX Example 3; SEQ ID NO 152; 140bp; English.  
 XX  
 CC This invention relates to novel short interfering nucleic acid (siNA)  
 CC molecules that downregulate expression of a protein tyrosine phosphatase-  
 CC 1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can  
 CC be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA  
 CC (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition  
 CC of PTP-1B. The present invention describes sequence-specific post-  
 CC transcriptional gene silencing in animals using siNA molecules and  
 CC antisense oligonucleotides to modulate PTP-1B gene expression or  
 CC activity. Furthermore, these siNA molecules provide useful reagents for a  
 CC variety of therapeutic and diagnostic purposes, and as such can be used  
 CC for treating obesity, insulin resistance or diabetes (types I and II), as  
 CC well as for drug screening, target identification and validation, genetic  
 CC engineering, pharmacogenomics and for studying gene function and gene  
 CC mapping (for example of single-nucleotide polymorphisms). Accordingly,  
 CC these molecules exhibit anorectic and antidiabetic activities. This  
 CC oligonucleotide sequence is a sense siNA molecule that targets human PTP-  
 CC 1B RNA of the invention.  
 CC  
 XX Sequence 19 BP; 5 A; 6 C; 3 G; 0 T; 5 U; 0 Other;  
 XX  
 SQ  
 Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY  
 330 GCTGATTCAAGAAGTG 345  
 :|||:|||||:|  
 16 GCTGTTTCAAGAAGTG 1  
 DB  
 RESULT 2948  
 ADF75796  
 ID ADF75796 standard; RNA; 19 BP.  
 XX  
 AC ADF75796;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Antisense siNA that down regulates human PTP-1B expression (SeqID 337).  
 XX  
 KW human; ss; siRNA; short interfering nucleic acid; siNA;  
 KW protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;  
 KW micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;  
 KW obesity; insulin resistance; diabetes; anorectic; antidiabetic.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2003070881-A2.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004123.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 26-JUL-2002; 2002US-00206705.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Mcswigen J, Beigelman L, Usman N;  
 PI



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PI Mcswiggen J, Beigelman L, Usman N;
XX WPI; 2003-697604/66.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of obesity; downregulates expression of a protein tyrosine
XX phosphatase-1B gene.
XX
XX Example 3; SEQ ID NO 337; 140bp; English.
XX
XX This invention relates to novel short interfering nucleic acid (siNA)
XX molecules that downregulate expression of a protein tyrosine phosphatase-
XX 1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can
XX be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA
XX (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition
XX of PTP-1B. The present invention describes sequence-specific post-
XX transcriptional gene silencing in animals using siNA molecules and
XX antisense oligonucleotides to modulate PTP-1B gene expression or
XX activity. Furthermore, these siNA molecules provide useful reagents for a
XX variety of therapeutic and diagnostic purposes, and as such can be used
XX for treating obesity, insulin resistance or diabetes (types I and II), as
XX well as for drug screening, target identification and validation, genetic
XX engineering, pharmacogenomics and for studying gene function and gene
XX mapping (for example of single-nucleotide polymorphisms). Accordingly,
XX these molecules exhibit anorectic and anti-diabetic activities. This
XX oligonucleotide sequence is an antisense siNA molecule that targets human
XX PTP-1B RNA of the invention.
XX
XX Sequence 19 BP; 5 A; 3 C; 6 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 68.8%; Pred. No. 2.1e+03;
XX Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 330 GCTGATTCAAGACTG 345
XX ||:|||||||:|
XX 4 GCUGUUUCAGAGAGUG 19
XX
XX RESULT 2949
XX ADP95015/C
XX ID ADP95015 standard; DNA; 19 BP.
XX
XX AC ADF95015;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human interferon alpha 2 quantitative PCR primer, SEQ ID:51.
XX
XX KW Human keratinocyte derived interferon; human KDI; agonist; antagonist;
XX finding partner identification; immune-related disorder; cancer;
XX KW viral infection; viral exposure; immunomodulatory virulence; cytostatic;
XX KW gene therapy; interferon alpha 2; expression analysis; quantitative PCR;
XX primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003031566-A2.
XX
XX PD 17-APR-2003.
XX
XX PF 19-JUL-2002; 2002WO-US023214.
XX
XX PR 20-JUL-2001; 2001US-00908594.
XX
XX PR 06-DEC-2001; 2001US-0336165P.
XX
XX PA (HUMA-) HUMAN GENOME SCI INC.
XX
XX PI Lafleur DW, Moore PA, Ruben SW;
XX WPI; 2003-381702/36.
XX
XX New isolated keratinocyte derived interferon (KDI) polypeptide, useful
XX

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```

PT for preventing, treating or ameliorating a medical condition, such as an
PT immune-related disorder, a viral infection, a viral exposure or cancer.
XX
XX Example 5; SEQ ID NO 51; 398bp; English.
XX
XX The invention relates to human keratinocyte derived interferon (KDI;
XX ADP94966) and nucleic acids encoding it (ADP94965). The KDI gene is
XX located on chromosome 9q22. The invention also relates to sequences at
XX least 70% identical to the KDI nucleic acid and protein sequences; a
XX polypeptide comprising an epitope-bearing portion of KDI; recombinant
XX vectors and host cells comprising a KDI nucleic acid sequence; a method
XX for the recombinant expression of KDI proteins; a KDI-specific antibody;
XX KDI agonists and antagonists; use of KDI nucleic acids or proteins for
XX treating medical conditions; a method for the diagnosis of a pathological
XX condition or susceptibility to a pathological condition; and methods of
XX screening for KDI binding partners. The KDI polypeptides and
XX polynucleotides, and methods of the invention are useful for preventing,
XX treating or ameliorating a medical condition, such as an immune-related
XX disorder, cancer, or a viral infection or viral exposure. The present
XX sequence is related to the invention.
XX
XX Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2926 TCAAGCTGCTCAAGTGG 2941
XX |||||
XX 19 TCAAGCTGCTCTGTGG 4
XX
XX DB ADH16829/C
XX
XX ID ADH16829 standard; RNA; 19 BP.
XX
XX AC ADH16829;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Human BACE siNA lower strand, SEQ ID NO:619.
XX
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX KW short hairpin RNA; shRNA; expression modulation; gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping;
XX KW Alzheimer's disease; dementia; stroke; cardiovascular accident;
XX KW beta-secretase; BACE; human; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070895-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 18-FEB-2003; 2003WO-US004710.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX
XX PR 11-MAR-2002; 2002US-0363124P.
XX
XX PR 06-JUN-2002; 2002US-0386782P.
XX
XX PR 25-JUL-2002; 2002US-00205309.
XX
XX PR 29-AUG-2002; 2002US-0406784P.
XX
XX PR 05-SEP-2002; 2002US-0408378P.
XX
XX PR 09-SEP-2002; 2002US-0409293P.
XX
XX PR 15-JAN-2003; 2003US-0440129P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Mcswiggen J, Beigelman L;
XX WPI; 2003-697608/66.
XX

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PT New short interfering nucleic acids, useful e.g. for treatment and
PT diagnosis of Alzheimer's disease, which down regulates expression of the
PT beta-secretase gene.
XX
XX
PS Example 3; SEQ ID NO 619; 144bp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human beta-secretase (BACE) gene by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised.
CC The invention also comprises a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the BACE gene in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating Alzheimer's disease or other degenerative conditions such as
CC dementia and stroke/cardiovascular accident. The siNAs are also useful
CC for drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human BACE-targeted
CC double-stranded siNA.
XX
SQ Sequence 19 BP; 5 A; 1 C; 3 G; 0 T; 10 U; 0 Other;
Query Match 0.1%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.1e+03;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2417 AGATTGAAATCCAA 2432
Db 19 AAATTGAAATCCAA 4
RESULT 2951
ADH16504 standard; RNA; 19 BP.
XX
XX ADH16504;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Human BACE transcript target sequence/siNA upper strand, SEQ ID NO:294.
DE
XX
XX RNA interference; short interfering nucleic acid; siNA;
KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KM short hairpin RNA; shRNA; expression modulation; gene therapy;
KM drug screening; diagnosis; therapeutic target identification;
KM pharmacogenomics; gene function analysis; gene mapping;
KM Alzheimer's disease; dementia; stroke; cardiovascular accident;
KM beta-secretase; BACE; human; target sequence; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003070895-A2.
PN
XX
XX 28-AUG-2003.
PD
XX
XX 18-FEB-2003; 2003WO-US004710.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 25-JUL-2002; 2002US-00205309.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.

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PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-). RIBOZYME PHARM INC.
PA
XX
XX Mcwiggan J, Beigelman L;
PI
XX
XX WPI; 2003-697608/66.
DR
XX
XX New short interfering nucleic acids, useful e.g. for treatment and
PT diagnosis of Alzheimer's disease, which down regulates expression of the
PT beta-secretase gene.
XX
XX
PS Example 3; SEQ ID NO 294; 144bp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human beta-secretase (BACE) gene by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised.
CC The invention also comprises a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the BACE gene in cells, tissue explants or
CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
CC for the treatment of a variety of conditions. They may be used for
CC treating Alzheimer's disease or other degenerative conditions such as
CC dementia and stroke/cardiovascular accident. The siNAs are also useful
CC for drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human BACE-targeted
CC double-stranded siNA, which is identical to the BACE transcript target
CC sequence.
XX
SQ Sequence 19 BP; 10 A; 3 C; 1 G; 0 T; 5 U; 0 Other;
Query Match 0.1%; Score 14.4; DB 1; Length 19;
Best Local Similarity 68.8%; Pred. No. 2.1e+03;
Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
Qy 2417 AGATTGAAATCCAA 2432
Db 1 AAATUGAAATCCAA 16
RESULT 2952
ABX99045/c
ID ABX99045 standard; DNA; 19 BP.
XX
XX ABX99045;
AC
XX
XX 20-MAY-2003 (first entry)
DT
XX
XX Human AAGA SNP analysis PCR primer, #72.
DE
XX
XX Human; PCR; primer; ss; asthma; bronchial hyperresponsiveness;
KM airway obstruction; chronic bronchial inflammation;
KM multifactorial disease; asthma-associated gene; AAGA; allele-specific;
KM single nucleotide polymorphism; SNP; genetic profile; gene therapy;
KM antisense gene therapy; adult distress respiratory syndrome;
KM chronic obstructive pulmonary; chronic bronchitis; dyspnea.
XX
XX Homo sapiens.
OS
XX
XX WO2003008640-A2.
PN
XX
XX 30-JAN-2003.
PD
XX
XX 15-JUL-2002; 2002WO-EP007847.
PF

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XX 16-JUL-2001; 2001US-0305649P.
XX
XX (NOVA ) NOVARTIS AG.
XX (NOVA ) NOVARTIS-BEFLINDUNGEN VERW GES MBH.
XX (UVA-) UNIV MAKE FOREST HEALTH SCI.
XX (UYR-) RIJCKSONIV GRONINGEN.
XX
XX Whitaker PA, Meyers DA, Postma DS, Bleecker ER,
XX WPI; 2003-239359/23.
XX
XX Determining whether a subject has or is at risk of developing a disease
XX characterized by bronchial hyperresponsiveness, comprises determining the
XX expression or bioactivity level of an asthma-associated gene.
XX
XX Example 3; Page 27; 70pp; English.
XX
XX The invention discloses a method for determining a disease (e.g asthma)
XX characterised by bronchial hyperresponsiveness, or the risk of developing
XX it and a way of obstructing or chronic bronchial inflammation. Asthma is a
XX multifactorial disease, so discovery of the asthma susceptibility genes
XX can identify the fundamental mechanisms behind asthma. One such gene is
XX the asthma-associated gene, AAGA. Also disclosed is an allele-specific
XX primer or oligonucleotide probe capable of detecting a polymorphism, an
XX AAGA associated with bronchial hyperresponsiveness and methods for
XX pharmacogenomically selecting a therapy to be administered to an
XX individual having asthma, comprising determining an AAGA genetic profile
XX and comparing the individual's genetic profile to an AAGA genetic
XX population profile, monitoring the effectiveness of treatment (e.g. gene
XX therapy or antisense gene therapy) of a subject and identifying a
XX substance which binds to or modulates the activity of AAGA. The
XX polynucleotide, polypeptide encoded by it, antibody to the polypeptide,
XX or an oligonucleotide, is useful for preparing a medicament for treating
XX a disease characterised by bronchial hyperresponsiveness, or inflammatory
XX or obstructive airways diseases, e.g. adult distress respiratory
XX syndrome, chronic obstructive pulmonary, chronic bronchitis or dyspnea.
XX The method is useful for prognosis, diagnosing or confirming that a
XX symptomatic subject has a genetic defect which causes or contributes to
XX the particular disease or disorder, for ascertaining an individual's
XX predilection to develop bronchial responsiveness and for customising a
XX therapy for the individual according to the individual's genetic profile.
XX The sequences presented in ABX98968-ABX99053 and ABX99064-ABX99066 are
XX PCR primers which were used to amplify sequences used in human AAGA
XX vector construction and primers used to analyse AAGA single nucleotide
XX polymorphisms (SNPs)
XX
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 3199 GAGAGGACAGAGCCTT 3214
XX 17 GAGAGGACAGAGCCTT 2
XX
XX RESULT 2953
XX ADH01651/C
XX ID ADH01651 standard; RNA; 19 BP.
XX
XX AC ADH01651;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Protein tyrosine phosphatase siRNA sequence, SEQ ID No 263.
XX
XX small interfering RNA; siRNA; protein tyrosine phosphatase; PTP; PTP1B;
XX insulin receptor protein phosphorylation; Jak2; antidiabetic; anorectic;
XX antiinflammatory; neuroprotective; cytostatic; immunosuppressive;
XX antimicrobial; gene therapy; ss; siRNA.

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XX Unidentified.
XX
XX WO2003099227-A2.
XX
XX 04-DEC-2003.
XX
XX 23-MAY-2003; 2003WO-US016651.
XX
XX 23-MAY-2002; 2002US-0383249P.
XX 14-APR-2003; 2003US-0462942P.
XX
XX (CEPT-) CEPTYR INC.
XX
XX Lewis SP, Klinghoffer R, Wilson LK;
XX WPI; 2004-035036/03.
XX
XX New small interfering polynucleotide that modulates protein tyrosine
XX phosphatase (PTP)1B polypeptide signal transduction, useful for treating
XX disorders associated with altered PTP1B signal transduction, e.g.
XX diabetes or cancer.
XX
XX Example 3; SEQ ID NO 263; 234pp; English.
XX
XX The invention relates to a novel isolated small interfering RNA (siRNA)
XX polynucleotide, comprising at least one nucleotide sequence from any of
XX the 20 fully defined sequences given in the specification. The invention
XX further relates to: a pharmaceutical composition comprising a new siRNA
XX polynucleotide and a physiological carrier; a recombinant nucleic acid
XX construct, comprising a polynucleotide that is capable of directing
XX transcription of an siRNA; a host cell transformed or transfected with
XX the above recombinant nucleic acid construct; a method for interfering
XX with expression of a protein tyrosine phosphatase (PTP)1B polypeptide, or
XX its variant; a method for identifying a component of a PTP1B signal
XX transduction pathway; a method for modulating an insulin receptor protein
XX phosphorylation state in a cell; a method for altering a Jak2 protein
XX associated disorder. The siRNA has the following activities:
XX anti-diabetic, anorectic, antiinflammatory, neuroprotective, cytostatic,
XX immunosuppressive, and antimicrobial. The novel siRNA polynucleotides can
XX be used in gene therapy to treat disorders. The composition and methods
XX are useful in treating disorders associated with PTP1B-mediated signal
XX transduction, such as diabetes, obesity, hyperglycemia-induced
XX apoptosis, inflammation, neurodegenerative disorders, cancer, autoimmune
XX diseases or infection. This polynucleotide sequence represents an siRNA
XX used for modulating the signal transduction of a protein tyrosine
XX phosphatase of the invention.
XX
XX Sequence 19 BP; 5 A; 6 C; 3 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 0.1%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+03;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 330 GCTGATTCAAGAGTG 345
XX 16 GCTGTTCAAGAGTG 1
XX
XX RESULT 2954
XX ADH01575/C
XX ID ADH01575 standard; RNA; 19 BP.
XX
XX AC ADH01575;
XX
XX DT 11-MAR-2004 (first entry)
XX
XX DE Protein tyrosine phosphatase siRNA sequence, SEQ ID No 187.
XX
XX small interfering RNA; siRNA; protein tyrosine phosphatase; PTP; PTP1B;
XX insulin receptor protein phosphorylation; Jak2; antidiabetic; anorectic;
XX antiinflammatory; neuroprotective; cytostatic; immunosuppressive;
XX antimicrobial; gene therapy; ss; siRNA.

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KW antimicrobial; gene therapy; ss; siRNA.  
 XX Unidentified.  
 OS  
 XX WO2003099227-A2.  
 PN  
 XX 04-DEC-2003.  
 PD  
 XX 23-MAY-2003; 2003WO-US016651.  
 PF  
 XX 23-MAY-2002; 2002US-0383249P.  
 PR 14-APR-2003; 2003US-0462942P.  
 PA (CEPT-) CEPTYR INC.  
 PI Lewis SP, Klinghoffer R, Wilson LK;  
 DR WPI; 2004-035036/03.  
 XX  
 XX New small interfering polynucleotide that modulates protein tyrosine  
 PT phosphatase (PTP)1B polypeptide signal transduction, useful for treating  
 PT disorders associated with altered PTP1B signal transduction, e.g.  
 PT diabetes or cancer.  
 XX  
 XX Example 3; SEQ ID NO 187; 234pp; English.  
 PS  
 XX The invention relates to a novel isolated small interfering RNA (siRNA)  
 CC polynucleotide, comprising at least one nucleotide sequence from any of  
 CC the 20 fully defined sequences given in the specification. The invention  
 CC further relates to: a pharmaceutical composition comprising a new siRNA  
 CC polynucleotide and a physiological carrier; a recombinant nucleic acid  
 CC construct, comprising a polynucleotide that is capable of directing  
 CC transduction of an siRNA; a host cell transformed or transfected with  
 CC the above recombinant nucleic acid construct; a method for interfering  
 CC with expression of a protein tyrosine phosphatase (PTP)1B polypeptide, or  
 CC its variant; a method for identifying a component of a PTP1B signal  
 CC transduction pathway; a method for modulating an insulin receptor protein  
 CC phosphorylation state in a cell; and a method for altering a Jak2-protein  
 CC phosphorylation state in a cell; and a method for treating a Jak2-  
 CC associated disorder. The siRNA has the following activities:  
 CC antidiabetic, anorectic, antiinflammatory, neuroprotective, cytostatic,  
 CC immunosuppressive, and antimicrobial. The novel siRNA polynucleotides can  
 CC be used in gene therapy to treat disorders. The composition and methods  
 CC are useful in treating disorders associated with PTP1B-mediated signal  
 CC transduction, such as diabetes, obesity, hyperglycaemia-induced  
 CC apoptosis, inflammation, neurodegenerative disorders, cancer, autoimmune  
 CC diseases or infection. This polynucleotide sequence represents an siRNA  
 CC used for modulating the signal transduction of a protein tyrosine  
 CC phosphatase of the invention.  
 CC  
 XX Sequence 19 BP; 6 A; 7 C; 2 G; 0 T; 4 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 330 GCTGATTCAAGAGTG 345  
 DB 19 GCTGTTTCAGGAGTG 4  
 RESULT 2955  
 ADG75426/c  
 ID ADG75426 standard; DNA; 19 BP.  
 XX  
 XX ADG75426;  
 AC  
 XX  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX  
 XX Human NOX1-b protein-related RT-PCR primer SeqID12.  
 DE  
 XX  
 XX Synovial membrane cell-originated oxidase; NOX1-b protein;  
 KW rheumatoid arthritis; antirheumatic; antiarthritic; arthritis deformans;

KW PCR; primer; ss; human; RT-PCR; reverse transcription-PCR.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003104454-A1.  
 PN  
 XX 18-DEC-2003.  
 PD  
 XX 05-JUN-2003; 2003WO-JP007148.  
 PF  
 XX 06-JUN-2002; 2002JP-00165612.  
 PR 07-MAR-2003; 2003JP-00060749.  
 XX  
 XX (YAMA ) YAMANOUCHI PHARM CO LTD.  
 PA  
 XX  
 XX Kawakami M;  
 PI  
 XX WPI; 2004-082001/08.  
 DR  
 XX  
 XX Synovial membrane cell-originated oxidase NOX1-b and gene encoding it,  
 PT useful in diagnosis of rheumatoid arthritis and in screening inhibitors  
 PT as drugs for compositions in treatment of arthritis deformans as well.  
 PT  
 XX  
 XX Example 7; SEQ ID NO 12; 48pp; Japanese.  
 PS  
 XX This invention relates to a novel Synovial membrane cell-originated  
 CC oxidase NOX1-b protein expressed specifically in patients with rheumatoid  
 CC arthritis. The invention may be useful for the development of compounds  
 CC with an antirheumatic or antiarthritic activity. The enzyme and the gene  
 CC which encodes it may be useful in diagnosis of rheumatoid arthritis and  
 CC in screening inhibitors as drugs for compositions in treatment of  
 CC rheumatoid arthritis and arthritis deformans. The present sequence is  
 CC that of an RT-PCR primer which was used during the exemplification of the  
 CC invention.  
 CC  
 XX Sequence 19 BP; 9 A; 5 C; 3 G; 2 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 2679 TCTGAGTCATGCTC 2694  
 DB 19 TTGAGTCATGCTC 4  
 RESULT 2956  
 ADR81854/c  
 ID ADR81854 standard; DNA; 19 BP.  
 XX  
 XX ADR81854;  
 AC  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 XX  
 XX Hepatitis C virus (HCV) oligonucleotide seqid 6353.  
 DE  
 XX  
 XX antilipemic; cardiact; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; RNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.  
 KW  
 OS Hepatitis C virus.  
 XX  
 XX WO2004080406-A2.  
 PN  
 XX 23-SEP-2004.  
 PD  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.

(ALNY-) ALNYLAM PHARM.

Manoharan M, Bumcrot D;

WPI; 2004-677362/66.

Interference RNA agent useful for treating dyslipidemia, coronary artery disease, diabetes, cancer or neurological disease, comprises sense sequence and antisense sequence which has specific modifications.

Example 5; SEQ ID NO 6353; 378bp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a sense sequence and an antisense sequence, where the sense sequences have one or more asymmetrical 2'-O alkyl modifications, the antisense sequences have one or more asymmetrical phosphorothioate modifications and the antisense sequence targets a human gene sequence. Also described are: a pharmaceutical preparation comprising (I); reducing (M) apob-100 levels or glucose-6-phosphatase levels in a subject; producing (I); introducing one or more asymmetrical modification in the sequence, where the modification decreases nuclease sensitivity while not decreasing its activity; a kit comprising (I) and instruction for its use; and a device that can be dispense or administer a composition comprising (I). (I) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M) is useful for reducing apob-100 levels or glucose-6-phosphatase levels. CC The subject is suffering from a disorder characterised by elevated or otherwise unwanted expression of apob-100, elevated or otherwise unwanted levels of cholesterol, and/or dysregulation of lipid metabolism. The disorder is chosen from the HDL/LDL cholesterol imbalance, dyslipidaemias, hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary artery disease (CAD), coronary heart disease (CHD) and atherosclerosis. (I) is administered to a subject to inhibit hepatic glucose production or for treating glucose-metabolism-related disorder e.g. diabetes or type-2 diabetes. (I) is useful for treating the diseases as mentioned above, cancer (e.g. breast, colon or lung cancer), neurological disease (e.g., Huntington disease or spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence represents a hepatitis C virus (HCV) antisense oligonucleotide that can be used to control HCV gene expression.

XX Sequence 19 BP; 2 A; 9 C; 6 G; 2 T; 0 U; 0 Other;

QY Query Match 0.1%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+03;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

141 AGGCGGCGGTGCTGG 156  
 DB 19 AGGCGGCGGTGCTGG 4

Search completed: October 5, 2005, 11:14:36  
 Job time : 523 secs

















C 983	15.2	0.1	20	1	US-10-832-777-785	Sequence 785, App
C 984	15.2	0.1	20	1	US-10-920-612-814	Sequence 814, App
C 985	15.2	0.1	20	1	US-10-920-612-817	Sequence 817, App
C 986	15.2	0.1	20	1	US-10-920-612-818	Sequence 818, App
C 987	15.2	0.1	20	1	US-10-920-612-866	Sequence 866, App
C 988	15.2	0.1	20	1	US-10-858-500-243	Sequence 243, App
C 989	15.2	0.1	20	1	US-10-858-500-404	Sequence 404, App
C 990	15.2	0.1	20	1	US-10-832-622B-441	Sequence 441, App
C 991	15.2	0.1	20	1	US-10-832-622B-785	Sequence 785, App
C 992	15.2	0.1	20	1	US-10-868-658-141	Sequence 141, App
C 993	15.2	0.1	20	1	US-10-902-704A-7	Sequence 7, App1
C 994	15.2	0.1	20	1	US-10-475-146-83	Sequence 83, App1
C 995	15.2	0.1	20	1	US-10-831-901A-2661	Sequence 2661, App
C 996	15.2	0.1	20	1	US-10-831-901A-2662	Sequence 2662, App
C 997	15.2	0.1	20	1	US-10-831-901A-2897	Sequence 2897, App
C 998	15.2	0.1	20	1	US-10-831-901A-2898	Sequence 2898, App
C 999	15.2	0.1	20	1	US-10-831-901A-2900	Sequence 2900, App
C1000	15.2	0.1	20	1	US-10-831-901A-2903	Sequence 2903, App
C1001	15.2	0.1	20	1	US-10-831-901A-3042	Sequence 3042, App
C1002	15.2	0.1	20	1	US-10-831-901A-3043	Sequence 3043, App
C1003	15.2	0.1	20	1	US-10-831-901A-11961	Sequence 11961, App
C1004	15.2	0.1	20	1	US-10-831-901A-11962	Sequence 11962, App
C1005	15.2	0.1	20	1	US-10-831-901A-24829	Sequence 24829, App
C1006	15.2	0.1	20	1	US-10-831-901A-24831	Sequence 24831, App
C1007	15.2	0.1	20	1	US-10-831-901A-29270	Sequence 29270, App
C1008	15.2	0.1	20	1	US-10-831-901A-29271	Sequence 29271, App
C1009	15.2	0.1	20	1	US-10-349-780A-18	Sequence 18, App1
C1010	15.2	0.1	20	1	US-10-980-002-160	Sequence 160, App
C1011	15.2	0.1	21	1	US-10-751-736-2106	Sequence 2106, App
C1012	15	0.1	15	1	US-10-440-850-808	Sequence 908, App
C1013	15	0.1	15	1	US-10-407-818-7	Sequence 7, App1
C1014	15	0.1	15	1	US-10-712-795-873	Sequence 873, App
C1015	15	0.1	15	1	US-10-920-612-873	Sequence 1457, App
C1016	15	0.1	17	1	US-09-866-108-1457	Sequence 1457, App
C1017	15	0.1	17	1	US-09-866-108-1458	Sequence 1458, App
C1018	15	0.1	17	1	US-09-866-108-1459	Sequence 1459, App
C1019	15	0.1	17	1	US-09-927-046-1161	Sequence 1161, App
C1020	15	0.1	17	1	US-10-723-361-1457	Sequence 1457, App
C1021	15	0.1	17	1	US-10-723-361-1458	Sequence 1458, App
C1022	15	0.1	17	1	US-10-723-361-1459	Sequence 1459, App
C1023	15	0.1	18	1	US-10-156-610-41	Sequence 41, App1
C1024	15	0.1	18	1	US-10-498-794-49	Sequence 49, App1
C1025	15	0.1	20	1	US-09-771-208-16	Sequence 16, App1
C1026	15	0.1	20	1	US-10-056-790-56	Sequence 56, App1
C1027	15	0.1	20	1	US-10-289-762-3561	Sequence 3561, App
C1028	14.8	0.1	18	1	US-10-146-575-23	Sequence 23, App1
C1029	14.8	0.1	18	1	US-10-169-983-27	Sequence 27, App1
C1030	14.8	0.1	18	1	US-10-035-978A-22	Sequence 22, App1
C1031	14.8	0.1	18	1	US-10-263-594-22	Sequence 22, App1
C1032	14.8	0.1	18	1	US-10-280-066-205	Sequence 205, App
C1033	14.8	0.1	18	1	US-10-440-850-1112	Sequence 1112, App
C1034	14.8	0.1	18	1	US-10-239-956-26	Sequence 26, App1
C1035	14.8	0.1	18	1	US-10-349-143-8116	Sequence 8116, App
C1036	14.8	0.1	18	1	US-10-455-229-28	Sequence 28, App1
C1037	14.8	0.1	18	1	US-10-473-741-166	Sequence 166, App
C1038	14.8	0.1	18	1	US-09-982-262B-43	Sequence 43, App1
C1039	14.8	0.1	18	1	US-10-702-817-22	Sequence 22, App1
C1040	14.8	0.1	19	1	US-10-702-817-24	Sequence 24, App1
C1041	14.8	0.1	19	1	US-10-128-449A-21	Sequence 43, App1
C1042	14.8	0.1	19	1	US-10-349-143-4602	Sequence 4602, App
C1043	14.8	0.1	19	1	US-10-294-228-31	Sequence 31, App1
C1044	14.8	0.1	19	1	US-10-454-663-43	Sequence 43, App1
C1045	14.8	0.1	19	1	US-10-798-090-1	Sequence 1, App1
C1046	14.8	0.1	19	1	US-10-798-090-100	Sequence 100, App
C1047	14.8	0.1	19	1	US-10-758-451-976	Sequence 976, App
C1048	14.8	0.1	19	1	US-10-923-115-31	Sequence 31, App1
C1049	14.8	0.1	19	1	US-10-923-115-147	Sequence 147, App
C1050	14.8	0.1	19	1	US-10-783-128-275	Sequence 275, App
C1051	14.8	0.1	19	1	US-10-783-128-276	Sequence 276, App
C1052	14.8	0.1	19	1	US-10-783-128-2027	Sequence 2027, App
C1053	14.8	0.1	19	1	US-10-783-128-2028	Sequence 2028, App
C1054	14.8	0.1	19	1	US-10-922-544-150	Sequence 150, App
C1055	14.8	0.1	19	1	US-10-922-544-324	Sequence 324, App

1056	14.8	0.1	19	1	US-10-923-522-263	Sequence 263, App
C1057	14.8	0.1	19	1	US-10-923-522-526	Sequence 526, App
C1058	14.8	0.1	19	1	US-10-918-896-65	Sequence 65, App1
C1059	14.8	0.1	19	1	US-10-918-896-342	Sequence 342, App1
1060	14.8	0.1	19	1	US-10-919-866-100	Sequence 100, App
C1061	14.8	0.1	19	1	US-10-923-516-244	Sequence 244, App
C1062	14.8	0.1	19	1	US-10-923-516-245	Sequence 245, App
C1063	14.8	0.1	19	1	US-10-923-516-275	Sequence 275, App
C1064	14.8	0.1	19	1	US-10-924-036-658	Sequence 658, App
C1065	14.8	0.1	19	1	US-10-824-036-276	Sequence 276, App
1066	14.8	0.1	19	1	US-10-824-036-2027	Sequence 2027, App
1067	14.8	0.1	19	1	US-10-824-036-2028	Sequence 2028, App

## ALIGNMENTS

```
RESULT 1
US-09-047-966-31
Sequence 31, Application US/09047966
Publication No. US20030138773A1
GENERAL INFORMATION:
APPLICANT: J. Gordon Foulkes, et al.
TITLE OF INVENTION: Methods of Transcriptionally
Modulating Gene Expression.
NUMBER OF SEQUENCES: 93
CORRESPONDENCE ADDRESS:
ADDRESSER: John P. White, Esq.
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 100036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/047, 966
FILING DATE: 03-MAR-1998
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28, 678
REFERENCE/DOCKET NUMBER: 26134-122A
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-391-0526
TELEX:
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 36 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-09-047-966-31
Query Match 0.3%; Score 36; DB 1; Length 36;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

123 CTGGCGATGACCCCGAGGCGCGTGTGGCG 158  
|||||  
Db 1 CTGGCGATGACCCCGAGGCGCGTGTGGCG 36

RESULT 2  
US-09-047-966-30  
Sequence 30, Application US/09047966  
Publication No. US20030138773A1  
GENERAL INFORMATION:

```

; APPLICANT: J. Gordon Foulkes, et al.
; TITLE OF INVENTION: Methods of Transcriptionally
; TITLE OF INVENTION: Modulating Gene Expression.
; NUMBER OF SEQUENCES: 93
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: John P. White, Esq.
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 100036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/047,966
; FILING DATE: 03-MAR-1998
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 26134-12ZA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-391-0526
; TELEX:
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-09-047-966-30

Query Match
Best Local Similarity 100.0%; Score 33; DB 1; Length 33;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy
Db 24 TGAGTCCCTTCTCGGTTGCTGCCGCTGAGAG 56
1 TGAGTCCCTTCTCGGTTGCTGCCGCTGAGAG 33

RESULT 3
US-09-047-966-29
; Sequence 29, Application US/09047966
; Publication No. US20030138773A1.
; GENERAL INFORMATION:
; APPLICANT: J. Gordon Foulkes, et al.
; TITLE OF INVENTION: Methods of Transcriptionally
; TITLE OF INVENTION: Modulating Gene Expression.
; NUMBER OF SEQUENCES: 93
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: John P. White, Esq.
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 100036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/047,966
; FILING DATE: 03-MAR-1998
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.

```

```

; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 26134-12ZA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-391-0526
; TELEX:
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-09-047-966-29

Query Match
Best Local Similarity 100.0%; Score 30; DB 1; Length 30;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy
Db 93 GGCCGAGCCCGAGAGCCGCGCCGAGCGGAG 122
1 GGCCGAGCCCGAGAGCCGCGCCGAGCGGAG 30

RESULT 4
US-09-920-033-6
; Sequence 6, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 6
; LENGTH: 28
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Probe
; US-09-920-033-6

Query Match
Best Local Similarity 100.0%; Score 28; DB 1; Length 28;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy
Db 4639 CTTGTCAAGAGGATCTTAACTAGGCGG 4666
1 CTTGTCAAGAGGATCTTAACTAGGCGG 28

RESULT 5
US-10-147-196-6
; Sequence 6, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 6
; LENGTH: 28
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Probe
; US-10-147-196-6

```

Query Match 0.2%; Score 28; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGATCTTAACACTGGCCG 4666  
DB 1 CTTGTCAGAGGATCTTAACACTGGCCG 28

## RESULT 6

US-10-388-263-548  
; Sequence 548, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:

; APPLICANT: Cowse, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasmor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohsahl, Cara  
; APPLICANT: Walt, Jacqueline R.  
; APPLICANT: Borchers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388,263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 548  
; LENGTH: 28  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Probe  
US-10-388-263-548

Query Match 0.2%; Score 28; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGATCTTAACACTGGCCG 4666  
DB 1 CTTGTCAGAGGATCTTAACACTGGCCG 28

## RESULT 7

US-10-712-795-6  
; Sequence 6, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 6  
; LENGTH: 28  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Probe  
US-10-712-795-6

Query Match 0.2%; Score 28; DB 1; Length 28;

Best Local Similarity 100.0%; Pred. No. 20;  
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGATCTTAACACTGGCCG 4666  
DB 1 CTTGTCAGAGGATCTTAACACTGGCCG 28

## RESULT 8

US-10-920-612-6  
; Sequence 6, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 6  
; LENGTH: 28  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Probe  
US-10-920-612-6

Query Match 0.2%; Score 28; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4639 CTTGTCAGAGGATCTTAACACTGGCCG 4666  
DB 1 CTTGTCAGAGGATCTTAACACTGGCCG 28

## RESULT 9

US-10-719-900-67512  
; Sequence 67512, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:

; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1  
; CURRENT APPLICATION NUMBER: US/10/719,900  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002-11-20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 67512  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-67512

Query Match 0.2%; Score 25; DB 1; Length 25;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4098 AAGTCTGTGGGATTCATCTGCCAT 4122  
DB 1 AAGTCTGTGGGATTCATCTGCCAT 25

RESULT 10  
US-10-719-900-67511

```
; Sequence 67511, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 67511
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
; US-10-719-900-67511

Query Match
Best Local Similarity 96.0%; Score 23.4; DB 1; Length 25;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4098 AAGTCTGTGGATTCATCTGCCAT 4122
Db 1 AAGTCTGTGGATTCATCTGCCAT 25

RESULT 11
; US-10-719-900-581005
; Sequence 581005, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 581005
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
; US-10-719-900-581005

Query Match
Best Local Similarity 0.2%; Score 23.4; DB 1; Length 25;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4458 GGAACCAACCCAGTCTCAAAAGTT 4482
Db 1 GGAACCAACCCAGTCTCAAAAGTT 25

RESULT 12
; US-09-920-033-5/c
; Sequence 5, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 5
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:

; OTHER INFORMATION: PCR Primer
; US-09-920-033-5

Query Match
Best Local Similarity 0.2%; Score 23; DB 1; Length 23;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4668 CTCATGAGAGTCCAACTGAG 4690
Db 23 CTCATGAGAGTCCAACTGAG 1

RESULT 13
; US-10-147-196-5/c
; Sequence 5, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 5
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
; US-10-147-196-5

Query Match
Best Local Similarity 0.2%; Score 23; DB 1; Length 23;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4668 CTCATGAGAGTCCAACTGAG 4690
Db 23 CTCATGAGAGTCCAACTGAG 1

RESULT 14
; US-10-388-263-547/c
; Sequence 547, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freier, Susan M.
; APPLICANT: Sasmer, Henri W.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 547
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
; US-10-388-263-547

Query Match
Best Local Similarity 0.2%; Score 23; DB 1; Length 23;
```



Best Local Similarity 100.0%; Pred. No. 75;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 4668 CTCATGAGAGTCCAACTGAG 4690  
Db 23 CTCATGAGAGTCCAACTGAG 1

RESULT 15  
US-10-712-795-5/c  
; Sequence 5, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 5  
; LENGTH: 23  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-712-795-5

Query Match 0.2%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 75;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4668 CTCATGAGAGTCCAACTGAG 4690  
Db 23 CTCATGAGAGTCCAACTGAG 1

RESULT 16  
US-10-920-612-5/c  
; Sequence 5, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 5  
; LENGTH: 23  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-920-612-5

Query Match 0.2%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 75;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4668 CTCATGAGAGTCCAACTGAG 4690  
Db 23 CTCATGAGAGTCCAACTGAG 1

RESULT 17  
US-10-719-900-46074  
; Sequence 46074, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1  
; CURRENT APPLICATION NUMBER: US/10/719,900  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 46074  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-46074

Query Match 0.2%; Score 22.4; DB 1; Length 25;  
Best Local Similarity 95.8%; Pred. No. 1e+02;  
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 4302 AAGCTGACTCTGTGGTTGACCTG 4325  
Db 1 AAGCTGACTCTGTGGTTGACCTG 24

RESULT 18  
US-09-511-008-7/c  
; Sequence 7, Application US/09511008  
; Publication No. US20030149997A1  
; GENERAL INFORMATION:  
; APPLICANT: Hageman, Gregory S.  
; TITLE OF INVENTION: University of Iowa Research Foundation  
; TITLE OF INVENTION: Diagnostics and Therapeutics for Arterial Wall  
; FILE REFERENCE: 020618-000600US  
; CURRENT APPLICATION NUMBER: US/09/511,008  
; CURRENT FILING DATE: 2000-02-22  
; PRIOR APPLICATION NUMBER: US 60/120,822  
; PRIOR FILING DATE: 1999-02-19  
; PRIOR APPLICATION NUMBER: US 60/120,668  
; PRIOR FILING DATE: 1999-02-19  
; PRIOR APPLICATION NUMBER: US 60/123,052  
; PRIOR FILING DATE: 1999-03-05  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 7  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: RT-PCR primer  
US-09-511-008-7

Query Match 0.2%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 96;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3422 CAAGAAATTTACTGAGTGGCC 3443  
Db 22 CAAGAAATTTACTGAGTGGCC 1

RESULT 19  
US-10-741-600-73090/c  
; Sequence 73090, Application US/10741600  
; Publication No. US20050026169A1  
; GENERAL INFORMATION:  
; APPLICANT: CARGILL, Michele et al.

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; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; CURRENT APPLICATION NUMBER: US/10/741,600
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 73090
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-73090

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1981 CTCTGAAGATCTCAACTTCC 2002
DB 22 CTCTGAAGATCTCAACTTCC 1

RESULT 20
US-11-021-465-7/c
; Sequence 7, Application US/11021465
; Publication No. US20050119536A1
; GENERAL INFORMATION:
; APPLICANT: Hageman, Gregory S.
; TITLE OF INVENTION: University of Iowa Research Foundation
; TITLE OF INVENTION: Diagnostics and Therapeutics for Arterial Wall
; FILE REFERENCE: 020618-000600US
; CURRENT APPLICATION NUMBER: US/11/021,465
; CURRENT FILING DATE: 2004-12-23
; PRIOR APPLICATION NUMBER: US/09/511,008
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/120,822
; PRIOR FILING DATE: 1999-02-19
; PRIOR APPLICATION NUMBER: US 60/120,668
; PRIOR FILING DATE: 1999-02-19
; PRIOR APPLICATION NUMBER: US 60/123,052
; PRIOR FILING DATE: 1999-03-05
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:RT-PCR primer
US-11-021-465-7

Query Match
Best Local Similarity 100.0%; Score 22; DB 1; Length 22;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3422 CAGAAAATTACTGAGTCCGCC 3443
DB 22 CAGAAAATTACTGAGTCCGCC 1

RESULT 21
US-10-719-900-249750
; Sequence 249750, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002 11 20
```

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; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 249750
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-249750

Query Match
Best Local Similarity 92.0%; Score 21.8; DB 1; Length 25;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4114 ATCTGCCATCTCGAGAGTTCAGT 4138
DB 1 ATCTGCCATCTCGAGAGTTCAGT 25

RESULT 22
US-10-719-900-290082
; Sequence 290082, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 290082
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-290082

Query Match
Best Local Similarity 92.0%; Score 21.8; DB 1; Length 25;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4222 ACTTGTAACAAGTGTCCGCTCCTA 4246
DB 1 ACTTGTAACAAGTGTCCGCTCCTA 25

RESULT 23
US-10-719-900-379324
; Sequence 379324, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 379324
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-379324

Query Match
Best Local Similarity 92.0%; Score 21.8; DB 1; Length 25;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4182 CTCTGGGTGTTTACGCTCTTCCA 4206
DB 1 CTCTGGGTGTTTACGCTCTTCCA 25
```

```
RESULT 24
US-10-719-900-456231
; Sequence 456231, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 456231
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-456231

Query Match
Best Local Similarity 92.0%; Score 21.8; DB 1; Length 25;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4320 GACCTGTTCTTCTACATGTGCAAG 4344
Db 1 GACCTGTTCTTCTTCTACATGTGCAAG 25

RESULT 25
US-10-719-900-581004
; Sequence 581004, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 581004
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-581004

Query Match
Best Local Similarity 92.0%; Score 21.8; DB 1; Length 25;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4458 GGAACACACCGCTCAAAAGTT 4482
Db 1 GGAACACACCGCTCAAAAGTT 25

RESULT 26
US-09-920-033-4
; Sequence 4, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 4

; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-09-920-033-4

Query Match
Best Local Similarity 100.0%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4616 TGCTAAGGACATATGGCTT 4636
Db 1 TGCTAAGGACATATGGCTT 21

RESULT 27
US-09-511-008-6
; Sequence 6, Application US/09511008
; Publication No. US2003014997A1
; GENERAL INFORMATION:
; APPLICANT: Hageman, Gregory S.
; APPLICANT: University of Iowa Research Foundation
; TITLE OF INVENTION: Diagnostics and Therapeutics for Arterial Wall
; TITLE OF INVENTION: Disruptive Disorders
; FILE REFERENCE: 020618-00600US
; CURRENT APPLICATION NUMBER: US/09/511,008
; CURRENT FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/120,822
; PRIOR FILING DATE: 1999-02-19
; PRIOR APPLICATION NUMBER: US 60/120,668
; PRIOR FILING DATE: 1999-02-19
; PRIOR APPLICATION NUMBER: US 60/123,052
; PRIOR FILING DATE: 1999-03-05
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: RT-PCR primer
US-09-511-008-6

Query Match
Best Local Similarity 100.0%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2830 TGAACACCACTTCTTCACG 2850
Db 1 TGAACACCACTTCTTCACG 21

RESULT 28
US-10-147-196-4
; Sequence 4, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 4
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-10-147-196-4
```

Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4616 TGCTAAGGCACATATGGCCT 4636  
DB 1 TGCTAAGGCACATATGGCCT 21

RESULT 29  
US-10-388-263-546

; Sequence 546, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:

; APPLICANT: Cowser, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freiler, Susan M.  
; APPLICANT: Sasner, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Hyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388,263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: PastSeq for Windows Version 4.0  
; SEQ ID NO 546  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-388-263-546

Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4616 TGCTAAGGCACATATGGCCT 4636  
DB 1 TGCTAAGGCACATATGGCCT 21

RESULT 30  
US-10-712-795-4

; Sequence 4, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 4  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-712-795-4

Query Match 0.1%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4616 TGCTAAGGCACATATGGCCT 4636  
DB 1 TGCTAAGGCACATATGGCCT 21

RESULT 31  
US-10-920-612-4

; Sequence 4, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 4  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-920-612-4

Query Match 0.1%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4616 TGCTAAGGCACATATGGCCT 4636  
DB 1 TGCTAAGGCACATATGGCCT 21

RESULT 32  
US-11-021-465-6

; Sequence 6, Application US/11021465  
; Publication No. US20050119536A1  
; GENERAL INFORMATION:  
; APPLICANT: Hageman, Gregory S.  
; TITLE OF INVENTION: Diagnostics and Therapeutics for Arterial Wall  
; TITLE OF INVENTION: Disruptive Disorders  
; FILE REFERENCE: 020618-000600US  
; CURRENT APPLICATION NUMBER: US/11/021,465  
; CURRENT FILING DATE: 2004-12-23  
; PRIOR APPLICATION NUMBER: US/09/511,008  
; PRIOR FILING DATE: 2000-02-22  
; PRIOR APPLICATION NUMBER: US 60/120,822  
; PRIOR FILING DATE: 1999-02-19  
; PRIOR APPLICATION NUMBER: US 60/120,668  
; PRIOR FILING DATE: 1999-02-19  
; PRIOR APPLICATION NUMBER: US 60/123,052  
; PRIOR FILING DATE: 1999-03-05  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 6  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: RT-PCR primer  
US-11-021-465-6

Query Match 0.1%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 2830 TGAACACCACTCTTCCACG 2850  
Db 1 TGAACACCACTCTTCCACG 21

RESULT 33  
US-10-741-600-73089/c  
; Sequence 73089, Application US/10741600  
; Publication No. US20050026169A1  
; GENERAL INFORMATION:  
; APPLICANT: CARGILL, Michele et al.  
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH  
; FILE REFERENCE: CL001499  
; CURRENT APPLICATION NUMBER: US/10/741,600  
; CURRENT FILING DATE: 2003-12-22  
; NUMBER OF SEQ ID NOS: 73997  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 73089  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-741-600-73089

Query Match  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1982 TCTGAAGAAATCTCACTTCC 2002  
Db 21 TCTGAAGAAATCTCACTTCC 1

RESULT 34  
US-10-719-900-46073  
; Sequence 46073, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1  
; CURRENT APPLICATION NUMBER: US/10/719,900  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 46073  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-46073

Query Match  
Best Local Similarity 91.7%; Pred. No. 1.7e+02;  
Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 4302 AAGGCTGACTCTGTGTGACCTG 4325  
Db 1 AAGACTGACTCTGTGTGACCTG 24

RESULT 35  
US-10-719-900-957818/c  
; Sequence 957818, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1

; CURRENT APPLICATION NUMBER: US/10/719,900  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 957818  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-957818

Query Match  
Best Local Similarity 91.7%; Pred. No. 1.7e+02;  
Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 556 TTTACCCGAGAAAGATGAACCTA 579  
Db 24 TTTACCGAGAGAAAGATGAACCA 1

RESULT 36  
US-10-719-900-874436/c  
; Sequence 874436, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1  
; CURRENT APPLICATION NUMBER: US/10/719,900  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 874436  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-874436

Query Match  
Best Local Similarity 95.5%; Pred. No. 1.9e+02;  
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1610 TATGGCCAAACCATGAGCAG 1631  
Db 24 TATGGCCAAACCATGAGCAG 3

RESULT 37  
US-10-719-956-407404  
; Sequence 407404, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT APPLICATION NUMBER: US/10/719,956  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 407404  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-407404

Query Match  
Best Local Similarity 95.5%; Pred. No. 1.9e+02;  
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy 330 GCTGATTCAAGAAGTGCACCA 351
Db 1 GCTGATTCAAAAAGTGCACCA 22

RESULT 38
US-10-719-900-33575
; Sequence 33575, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 33575
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-33575

Query Match 0.1%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 2e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 444 AACCTGAGGCAAGCCTTGCTGA 468
Db 1 AACCTGAGGCCAAAGCTGTGCTGA 25

RESULT 39
US-10-719-900-51924
; Sequence 51924, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 51924
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-51924

Query Match 0.1%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 2e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3517 AACGAGAGCCAGAGTAGAGTCT 3541
Db 1 AACGAGTAGCCAGAAATGAGGTCT 25

RESULT 40
US-10-719-900-249749
; Sequence 249749, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
```

```
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 249749
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-249749

Query Match 0.1%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 2e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4114 ATCTGCATCTCGAGAGTTCAGT 4138
Db 1 ATCTGCATCTCGAGAGTTCAGT 25

RESULT 41
US-10-719-900-290081
; Sequence 290081, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 290081
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-290081

Query Match 0.1%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 2e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4222 ACTTGACACTGTCGCTCCTTA 4246
Db 1 ACTTGACACTGTCGCTCCTTA 25

RESULT 42
US-10-719-900-379325
; Sequence 379325, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 379325
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-379325

Query Match 0.1%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 2e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

Qy 4182 CTCCTGGGTGTTCTAGACCTTCCA 4206  
Db 1 CTCCTGGGTGTTCTAGACCTTCCA 25

RESULT 43  
US-10-719-900-456230  
; Sequence 456230, Application US/10719900  
; Publication No. US20050026164A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
; FILE REFERENCE: 3528.1  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,808  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 982914  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 456230  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-10-719-900-456230

Query Match  
Best Local Similarity 0.1%; Score 20.2; DB 1; Length 25;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4320 GACCTGCTTCTCCTACATGTCGAAG 4344  
Db 1 GACCTGCTTCTCCTACATGTCGAAG 25

RESULT 44  
US-10-719-956-142778  
; Sequence 142778, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 142778  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-142778

Query Match  
Best Local Similarity 0.1%; Score 20.2; DB 1; Length 25;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2593 AGAATGACTTTTCTCCTACTACT 2617  
Db 1 AGAATGACTTTTCTCCTACTACT 25

RESULT 45  
US-10-719-956-170298  
; Sequence 170298, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT FILING DATE: 2003-11-20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 170298  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-170298

; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 170298  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-170298

Query Match  
Best Local Similarity 0.1%; Score 20.2; DB 1; Length 25;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2833 ACACCACTTCTTCCACGAGTCGG 2857  
Db 1 ATACAACTTCTTCCACGAGTCAG 25

RESULT 46  
US-10-719-956-306246  
; Sequence 306246, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 306246  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-306246

Query Match  
Best Local Similarity 0.1%; Score 20.2; DB 1; Length 25;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2979 GAGGTGATCCACCTTCTGATGAGA 3003  
Db 1 GAGGTGATCCACCTTCTGATGAGA 25

RESULT 47  
US-10-719-956-511305  
; Sequence 511305, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002 11 20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 511305  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-511305

Query Match  
Best Local Similarity 0.1%; Score 20.2; DB 1; Length 25;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2748 GTGCAAAACCTCGTGTCTGTG 2772

Db 1 GTGGCAAAAGCCTGTCTTTGG 25

## RESULT 48

US-10-719-956-580113  
; Sequence 580113, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT APPLICATION NUMBER: US/10/719,956  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002-11-20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 580113  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-580113

Query Match 0.1%; Score 20.2; DB 1; Length 25;  
Best Local Similarity 88.0%; Pred. No. 2e+02; Indels 0; Gaps 0;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2794 TCATCATTCGCGACTTCGCTAGAG 2818  
Db 1 TCATCATCCAGACTTCGCTAGAG 25

## RESULT 49

US-10-719-956-697491/c  
; Sequence 697491, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT APPLICATION NUMBER: US/10/719,956  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002-11-20  
; NUMBER OF SEQ ID NOS: 699466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 697491  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-697491

Query Match 0.1%; Score 20.2; DB 1; Length 25;  
Best Local Similarity 88.0%; Pred. No. 2e+02; Indels 0; Gaps 0;  
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 450 GAGGGCAAGCCTTGCTGAAGAAA 474  
Db 25 GAGGGCAAGCCTAGAAAGAAAA 1

## RESULT 50

US-09-920-033-17/c  
; Sequence 17, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01

; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 17  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-17

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATCCACCGGAGCTGCG 20  
Db 20 ATCCACCGGAGCTGCG 1

## RESULT 51

US-09-920-033-18/c  
; Sequence 18, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 18  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-18

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 21 GGCTGAGTGGCTTCTCGT 40  
Db 20 GGCTGAGTGGCTTCTCGT 1

## RESULT 52

US-09-920-033-19/c  
; Sequence 19, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 19  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-19

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02; Indels 0; Gaps 0;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 71 CAGGGCCGCGAGCGGAGC 90  
Db 20 CAGGGCCGCGAGCGGAGC 1



Db 20 CAGGCGCCGAGCGCGAGC 1

RESULT 53  
US-09-920-033-20/c  
; Sequence 20, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; APPLICANT: Mark J. Graham  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 20  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-20

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 CCACCGCAGCTGGCGATGA 133  
Db 20 CCACCGCAGCTGGCGATGA 1

RESULT 54  
US-09-920-033-21/c  
; Sequence 21, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; APPLICANT: Mark J. Graham  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 21  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-21

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGGCGCTG 170  
Db 20 TGCTGGCGCTGCTGGCGCTG 1

RESULT 55  
US-09-920-033-22/c  
; Sequence 22, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; APPLICANT: Mark J. Graham  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123

; SEQ ID NO 22  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-22

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGGCGGC 200  
Db 20 TGCTGCTGCTGCTGGCGGC 1

RESULT 56  
US-09-920-033-23/c  
; Sequence 23, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; APPLICANT: Mark J. Graham  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 23  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-23

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 321 CCTGGACCTGCTGATTCAAG 340  
Db 20 CCTGGACCTGCTGATTCAAG 1

RESULT 57  
US-09-920-033-24/c  
; Sequence 24, Application US/09920033  
; Publication No. US20030087853A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosanne M. Crooke  
; APPLICANT: Mark J. Graham  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: ISPH-0592  
; CURRENT APPLICATION NUMBER: US/09/920,033  
; CURRENT FILING DATE: 2001-08-01  
; NUMBER OF SEQ ID NOS: 123  
; SEQ ID NO 24  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-09-920-033-24

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 451 AGGCAAGCCTTGCTGAAG 470  
Db 20 AGGCAAGCCTTGCTGAAG 1

```
RESULT 58
US-09-920-033-25/c
; Sequence 25, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920.033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-25
Query Match
0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 716 GGGCAATGTGCAACAGAA 735
Db 20 GGGCAATGTGCAACAGAA 1

RESULT 59
US-09-920-033-26/c
; Sequence 26, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920.033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 26
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-26
Query Match
0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 911 CAAGAGCAACACCTCTCC 930
Db 20 CAAGAGCAACACCTCTCC 1

RESULT 60
US-09-920-033-27/c
; Sequence 27, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920.033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 27
```

```
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-27
Query Match
0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 951 AAGTATGGATGTAGCACA 970
Db 20 AAGTATGGATGTAGCACA 1

RESULT 61
US-09-920-033-28/c
; Sequence 28, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920.033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-28
Query Match
0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1041 AAGATGGGCTCGCATTTGA 1060
Db 20 AAGATGGGCTCGCATTTGA 1

RESULT 62
US-09-920-033-29/c
; Sequence 29, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920.033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-29
Query Match
0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1231 CACAGCTGATGTAGGTGTC 1250
Db 20 CACAGCTGATGTAGGTGTC 1
```

```
RESULT 63
US-09-920-033-30/c
; Sequence 30, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-30

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1361 CACCTACCTGCTGGCCCTGA 1380
Db 20 CACCTACCTGCTGGCCCTGA 1

RESULT 64
US-09-920-033-31/c
; Sequence 31, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-31

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1561 GCACCTGGGAGTGAAGATTAC 1580
Db 20 GCACCTGGGAGTGAAGATTAC 1

RESULT 65
US-09-920-033-32/c
; Sequence 32, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 32
; LENGTH: 20
```

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-32
```

```
Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1611 ATGGGCCAACAATGAGCA 1630
Db 20 ATGGGCCAACAATGAGCA 1
```

```
RESULT 66
US-09-920-033-33/c
; Sequence 33, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 33
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-33
```

```
Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1791 GGAGATPAGGACTGCTGC 1810
Db 20 GGAGATPAGGACTGCTGC 1
```

```
RESULT 67
US-09-920-033-34/c
; Sequence 34, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-34
```

```
Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2331 GTGACCACTTTGGCTATAC 2350
Db 20 GTGACCACTTTGGCTATAC 1
```

```
RESULT 68
US-09-920-033-35/c
; Sequence 35, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-35

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2496 CATGACCTCCAGCTCTGCGG 2515
DB      20 CATGACCTCCAGCTCTGCGG 1

RESULT 69
US-09-920-033-36/c
; Sequence 36, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 36
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-36

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2573 GGTATCATGAGGAGGCTCAA 2592
DB      20 GGTATCATGAGGAGGCTCAA 1

RESULT 70
US-09-920-033-37/c
; Sequence 37, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
```

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-37

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2811 GCTAGAGTGGGGTCCAGAT 2830
DB      20 GCTAGAGTGGGGTCCAGAT 1

RESULT 71
US-09-920-033-38/c
; Sequence 38, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-38

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2842 TCTTCCAGAGTGGGCTGTG 2861
DB      20 TCTTCCAGAGTGGGCTGTG 1

RESULT 72
US-09-920-033-39/c
; Sequence 39, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-39

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3367 ATGATGAATCTACTGAGGCG 3386
DB      20 ATGATGAATCTACTGAGGCG 1

RESULT 73
```

```
US-09-920-033-40/c
; Sequence 40, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-40
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      3611 TTCGAAGGCGTGTGCATGCGC 3630
Db      20  TTCCAAGAGGCTGTGCATGCGC 1
```

```
RESULT 74
US-09-920-033-41/c
; Sequence 41, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-41
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      3791 GACTTTCCGCGACGTGGGTT 3810
Db      20  GACTTTCCGCGACGTGGGTT 1
```

```
RESULT 75
US-09-920-033-42/c
; Sequence 42, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-42
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      3641 TTCGAAGGCGATCTGGAGT 3660
Db      20  TTCGAAGGCGATCTGGAGT 1
```

```
RESULT 76
US-09-920-033-43/c
; Sequence 43, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-43
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      4281 CTTGGGCTGTTCACACAT 4300
Db      20  CTTGGGCTGTTCACACAT 1
```

```
RESULT 77
US-09-920-033-44/c
; Sequence 44, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-920-033-44
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      4391 ATGTGATGGGCTCTACGCC 4410
Db      20  ATGTGATGGGCTCTACGCC 1
```

```
RESULT 78
US-09-920-033-45/c
```

```
; Sequence 45, Application US/09920033
; Publication No. US20030087853A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0592
; CURRENT APPLICATION NUMBER: US/09/920,033
; CURRENT FILING DATE: 2001-08-01
; NUMBER OF SEQ ID NOS: 123
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-09-920-033-45

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4641 TGTGAGGAGGATCTTAACAC 4660
Db 20 TGTGAGGAGGATCTTAACAC 1

RESULT 79
US-10-147-196-17/c
; Sequence 17, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 17
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-17

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATTCACCGGAGGACTGCGG 20
Db 20 ATTCACCGGAGGACTGCGG 1

RESULT 80
US-10-147-196-18/c
; Sequence 18, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 18
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-18

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 GGCTGAGTGCCCTTCGGT 40
Db 20 GGCTGAGTGCCCTTCGGT 1

RESULT 81
US-10-147-196-19/c
; Sequence 19, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 19
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-19

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 71 CAGGCGCGGAGGCGGAGGC 90
Db 20 CAGGCGCGGAGGCGGAGGC 1

RESULT 82
US-10-147-196-20/c
; Sequence 20, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 20
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-20

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 CCACCGCAGCTGGCGATGGA 133
Db 20 CCACCGCAGCTGGCGATGGA 1

RESULT 83
US-10-147-196-21/c
; Sequence 21, Application US/10147196
```

```
Publication No. US20030215943A1
GENERAL INFORMATION:
APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: ISPH-0664
CURRENT APPLICATION NUMBER: US/10/147,196
CURRENT FILING DATE: 2002-05-15
NUMBER OF SEQ ID NOS: 124
SEQ ID NO 21
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-21

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 151 TGCTGGCGCTGCTGCGCGCTG 170
DB 20 TGCTGGCGCTGCTGCGCGCTG 1

RESULT 84
US-10-147-196-22/c
Sequence 22, Application US/10147196
Publication No. US20030215943A1
GENERAL INFORMATION:
APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: ISPH-0664
CURRENT APPLICATION NUMBER: US/10/147,196
CURRENT FILING DATE: 2002-05-15
NUMBER OF SEQ ID NOS: 124
SEQ ID NO 22
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-22

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 181 TGCTGGCGCTGCTGCGCGGC 200
DB 20 TGCTGGCGCTGCTGCGCGGC 1

RESULT 85
US-10-147-196-23/c
Sequence 23, Application US/10147196
Publication No. US20030215943A1
GENERAL INFORMATION:
APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: ISPH-0664
CURRENT APPLICATION NUMBER: US/10/147,196
CURRENT FILING DATE: 2002-05-15
NUMBER OF SEQ ID NOS: 124
SEQ ID NO 23
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
```

```
US-10-147-196-23

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 321 CCTGGAGCTGCTGATTCAG 340
DB 20 CCTGGAGCTGCTGATTCAG 1

RESULT 86
US-10-147-196-24/c
Sequence 24, Application US/10147196
Publication No. US20030215943A1
GENERAL INFORMATION:
APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: ISPH-0664
CURRENT APPLICATION NUMBER: US/10/147,196
CURRENT FILING DATE: 2002-05-15
NUMBER OF SEQ ID NOS: 124
SEQ ID NO 24
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-24

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 451 AGGCGAAGCCTTGCTGAAG 470
DB 20 AGGCGAAGCCTTGCTGAAG 1

RESULT 87
US-10-147-196-25/c
Sequence 25, Application US/10147196
Publication No. US20030215943A1
GENERAL INFORMATION:
APPLICANT: Rosanne M. Crooke
APPLICANT: Mark J. Graham
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: ISPH-0664
CURRENT APPLICATION NUMBER: US/10/147,196
CURRENT FILING DATE: 2002-05-15
NUMBER OF SEQ ID NOS: 124
SEQ ID NO 25
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-25

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 716 GGGCAATGTGGCAACGAAA 735
DB 20 GGGCAATGTGGCAACGAAA 1

RESULT 88
US-10-147-196-26/c
Sequence 26, Application US/10147196
Publication No. US20030215943A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 26
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-26

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      911 CAAGAGCAACACCTCTCC 930
Db      20 CAAGAGCAACACCTCTCC 1

RESULT 89
US-10-147-196-27/c
; Sequence 27, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 27
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-27

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      951 AAGTATGGATGCTAGCACA 970
Db      20 AAGTATGGATGCTAGCACA 1

RESULT 90
US-10-147-196-28/c
; Sequence 28, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-28

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1041 AAGATGGGCTCGCATTGA 1060
Db      20 AAGATGGGCTCGCATTGA 1

RESULT 91
US-10-147-196-29/c
; Sequence 29, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-29

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1231 CACAGCTGATTGAGTGCTCC 1250
Db      20 CACAGCTGATTGAGTGCTCC 1

RESULT 92
US-10-147-196-30/c
; Sequence 30, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-30

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1361 CACCTACTGTGTGGCCCTGA 1380
Db      20 CACCTACTGTGTGGCCCTGA 1

RESULT 93
US-10-147-196-31/c
; Sequence 31, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-31
```



```

; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-31
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1561 GCACCTGGGGATGAGATTAC 1580
Db      20  GCACCTGGGGATGAGATTAC 1
```

```

RESULT 94
US-10-147-196-32/C
; Sequence 32, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 32
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-32
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1611 ATGGGCCCAACCATGAGACA 1630
Db      20  ATGGGCCCAACCATGAGACA 1
```

```

RESULT 95
US-10-147-196-33/C
; Sequence 33, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 33
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-33
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1791 GGAGATTAAGCGACTGGCTGC 1810
Db      20  GGAGATTAAGCGACTGGCTGC 1
```

```

RESULT 96
US-10-147-196-34/C
; Sequence 34, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-34
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      2331 GTGACCACTTGGCTATAC 2350
Db      20  GTGACCACTTGGCTATAC 1
```

```

RESULT 97
US-10-147-196-35/C
; Sequence 35, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-35
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      2496 CATGACCTCAGCTCCTGGG 2515
Db      20  CATGACCTCAGCTCCTGGG 1
```

```

RESULT 98
US-10-147-196-36/C
; Sequence 36, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
```

```
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 36
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-36
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 2573 GGTGATCAGAGAGGCTCAA 2592
Db 20 GGTGATCAGAGAGGCTCAA 1
```

```
RESULT 99
US-10-147-196-37/c
; Sequence 37, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-37
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 2811 GCTAGAGTGGGTCAGAT 2830
Db 20 GCTAGAGTGGGTCAGAT 1
```

```
RESULT 100
US-10-147-196-38/c
; Sequence 38, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-38
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
```

```
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 2842 TCTTCACGAGTGGGCTCG 2861
Db 20 TCTTCACGAGTGGGCTCG 1
```

```
RESULT 101
US-10-147-196-39/c
; Sequence 39, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-39
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3367 ATGATGATCTACTGAGGCG 3386
Db 20 ATGATGATCTACTGAGGCG 1
```

```
RESULT 102
US-10-147-196-40/c
; Sequence 40, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-147-196-40
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3611 TTCCAGAGGCTGGCATGCG 3630
Db 20 TTCCAGAGGCTGGCATGCG 1
```

```
RESULT 103
US-10-147-196-41/c
; Sequence 41, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
```

```

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-41

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3791 GACTTCCGCGCAGCGGGTT 3810
DB 20 GACTTCCGCGCAGCGGGTT 1

RESULT 104
US-10-147-196-42/C
; Sequence 42, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-42

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3841 TTCAGAGGCACTCTGGAGT 3860
DB 20 TTCAGAGGCACTCTGGAGT 1

RESULT 105
US-10-147-196-43/C
; Sequence 43, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-43

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4281 CTTGGGGCTCGTTACCAAT 4300
DB 20 CTTGGGGCTCGTTACCAAT 1

RESULT 106
US-10-147-196-44/C
; Sequence 44, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-44

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4391 ATGTGATGGGTCTCTACGCC 4410
DB 20 ATGTGATGGGTCTCTACGCC 1

RESULT 107
US-10-147-196-45/C
; Sequence 45, Application US/10147196
; Publication No. US20030215943A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: ISPH-0664
; CURRENT APPLICATION NUMBER: US/10/147,196
; CURRENT FILING DATE: 2002-05-15
; NUMBER OF SEQ ID NOS: 124
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-147-196-45

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4641 TGTCAAGGAGATCTTAACAC 4660
DB 20 TGTCAAGGAGATCTTAACAC 1

RESULT 108
US-10-388-263-549/C
; Sequence 349, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowser, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeil, John
```

```

; APPLICANT: Freier, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 549
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-549

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATTCACCGGACCTGCGG 20
DB 20 ATTCACCGGACCTGCGG 1

RESULT 109
US-10-388-263-550/c
; Sequence 550, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowert, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freier, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 550
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-550

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 GGCTGAGTGCCTTCGCT 40
DB 20 GGCTGAGTGCCTTCGCT 1

RESULT 110
```

```

US-10-388-263-551/c
; Sequence 551, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowert, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freier, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 551
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-551

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 71 CAGGCGCGGAGCGCGAGC 90
DB 20 CAGGCGCGGAGCGCGAGC 1

RESULT 111
US-10-388-263-552/c
; Sequence 552, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowert, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freier, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 552
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-552

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 114 CCACCGCAGCTGGCGATGGA 133  
 |||||  
 DB 20 CCACCGCAGCTGGCGATGGA 1

RESULT 112  
 US-10-388-263-553/c  
 ; Sequence 553, Application US/10388263  
 ; Publication No. US20030228597A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cowsett, Lex M.  
 ; APPLICANT: Baker, Brenda F.  
 ; APPLICANT: McNeil, John  
 ; APPLICANT: Freier, Susan M.  
 ; APPLICANT: Sasnor, Henri M.  
 ; APPLICANT: Brooks, Douglas G.  
 ; APPLICANT: Ohashi, Cara  
 ; APPLICANT: Wyatt, Jacqueline R.  
 ; APPLICANT: Borchers, Alexander  
 ; APPLICANT: Vickers, Timothy A.  
 ; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
 ; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
 ; FILE REFERENCE: ISIS-4503  
 ; CURRENT APPLICATION NUMBER: US/10/388,263  
 ; CURRENT FILING DATE: 2003-03-12  
 ; NUMBER OF SEQ ID NOS: 947  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 553  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Antisense Oligonucleotide  
 US-10-388-263-553

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 151 TGCTGGCGCTGCTGGCGCTG 170  
 |||||  
 DB 20 TGCTGGCGCTGCTGGCGCTG 1

RESULT 113  
 US-10-388-263-554/c  
 ; Sequence 554, Application US/10388263  
 ; Publication No. US20030228597A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cowsett, Lex M.  
 ; APPLICANT: Baker, Brenda F.  
 ; APPLICANT: McNeil, John  
 ; APPLICANT: Freier, Susan M.  
 ; APPLICANT: Sasnor, Henri M.  
 ; APPLICANT: Brooks, Douglas G.  
 ; APPLICANT: Ohashi, Cara  
 ; APPLICANT: Wyatt, Jacqueline R.  
 ; APPLICANT: Borchers, Alexander  
 ; APPLICANT: Vickers, Timothy A.  
 ; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
 ; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
 ; FILE REFERENCE: ISIS-4503  
 ; CURRENT APPLICATION NUMBER: US/10/388,263  
 ; CURRENT FILING DATE: 2003-03-12  
 ; NUMBER OF SEQ ID NOS: 947  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 554  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence

FEATURE:  
 ; OTHER INFORMATION: Antisense Oligonucleotide  
 US-10-388-263-554

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 181 TGCTGCTGCTGCTGGCGGCG 200  
 |||||  
 DB 20 TGCTGCTGCTGCTGGCGGCG 1

RESULT 114  
 US-10-388-263-555/c  
 ; Sequence 555, Application US/10388263  
 ; Publication No. US20030228597A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cowsett, Lex M.  
 ; APPLICANT: Baker, Brenda F.  
 ; APPLICANT: McNeil, John  
 ; APPLICANT: Freier, Susan M.  
 ; APPLICANT: Sasnor, Henri M.  
 ; APPLICANT: Brooks, Douglas G.  
 ; APPLICANT: Ohashi, Cara  
 ; APPLICANT: Wyatt, Jacqueline R.  
 ; APPLICANT: Borchers, Alexander  
 ; APPLICANT: Vickers, Timothy A.  
 ; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
 ; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
 ; FILE REFERENCE: ISIS-4503  
 ; CURRENT APPLICATION NUMBER: US/10/388,263  
 ; CURRENT FILING DATE: 2003-03-12  
 ; NUMBER OF SEQ ID NOS: 947  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 555  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Antisense Oligonucleotide  
 US-10-388-263-555

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 321 CCTGGAGCTGCTGATTCAAG 340  
 |||||  
 DB 20 CCTGGAGCTGCTGATTCAAG 1

RESULT 115  
 US-10-388-263-556/c  
 ; Sequence 556, Application US/10388263  
 ; Publication No. US20030228597A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Cowsett, Lex M.  
 ; APPLICANT: Baker, Brenda F.  
 ; APPLICANT: McNeil, John  
 ; APPLICANT: Freier, Susan M.  
 ; APPLICANT: Sasnor, Henri M.  
 ; APPLICANT: Brooks, Douglas G.  
 ; APPLICANT: Ohashi, Cara  
 ; APPLICANT: Wyatt, Jacqueline R.  
 ; APPLICANT: Borchers, Alexander  
 ; APPLICANT: Vickers, Timothy A.  
 ; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
 ; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
 ; FILE REFERENCE: ISIS-4503  
 ; CURRENT APPLICATION NUMBER: US/10/388,263

```
/ CURRENT FILING DATE: 2003-03-12
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 556
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-556
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      451 AGGGCAAGCCTGCTGAAG 470
DB      20 AGGGCAAGCCTGCTGAAG 1
```

RESULT 116

```
US-10-388-263-557/C
/ Sequence 557, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 557
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-557
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      716 GGGCATGTGGCAACGAAA 735
DB      20 GGGCATGTGGCAACGAAA 1
```

RESULT 117

```
US-10-388-263-558/C
/ Sequence 558, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
```

```
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 558
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-558
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      911 CAAGAGCAACACCTCTTCC 930
DB      20 CAAGAGCAACACCTCTTCC 1
```

RESULT 118

```
US-10-388-263-559/C
/ Sequence 559, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 559
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-559
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      951 AAGTATGGATGTATGACACA 970
DB      20 AAGTATGGATGTATGACACA 1
```

RESULT 119

```
US-10-388-263-560/C
/ Sequence 560, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
```

```

; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 560
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-560
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      1041 AAGATGGGCTCGCATTTGA 1060
Db      20  AAGATGGGCTCGCATTTGA 1
```

```
RESULT 120
US-10-388-263-561/c
; Sequence 561, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 561
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-561
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      1231 CACAGCTGATTGAGTGTC 1250
Db      20  CACAGCTGATTGAGTGTC 1
```

```
RESULT 121
US-10-388-263-562/c
; Sequence 562, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 562
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-562
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      1361 CACCTACTGCTGGCCCTGA 1380
Db      20  CACCTACTGCTGGCCCTGA 1
```

```
RESULT 122
US-10-388-263-563/c
; Sequence 563, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 563
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-563
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1561 GCACGTGGGATGAAGATTAC 1580  
Db 20 GCACGTGGGATGAAGATTAC 1

RESULT 123  
US-10-388-263-564/c

/ Sequence 564, Application US/10388263  
/ Publication No. US20030228597A1

/ GENERAL INFORMATION:

/ APPLICANT: Cowsett, Lex M.

/ APPLICANT: Baker, Brenda F.

/ APPLICANT: McNeill, John

/ APPLICANT: Freier, Susan M.

/ APPLICANT: Sasnor, Henri M.

/ APPLICANT: Brooks, Douglas G.

/ APPLICANT: Ohashi, Cara

/ APPLICANT: Wyatt, Jacqueline R.

/ APPLICANT: Borchers, Alexander

/ APPLICANT: Vickers, Timothy A.

/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR

/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND

/ FILE REFERENCE: ISIS-4503

/ CURRENT APPLICATION NUMBER: US/10/388,263

/ NUMBER OF SEQ ID NOS: 947

/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 564

/ LENGTH: 20

/ TYPE: DNA

/ ORGANISM: Artificial Sequence

/ FEATURE:

/ OTHER INFORMATION: Antisense Oligonucleotide

US-10-388-263-564

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1611 ATGGGCCAACCATTGGAGCA 1630  
Db 20 ATGGGCCAACCATTGGAGCA 1

RESULT 124  
US-10-388-263-565/c

/ Sequence 565, Application US/10388263  
/ Publication No. US20030228597A1

/ GENERAL INFORMATION:

/ APPLICANT: Cowsett, Lex M.

/ APPLICANT: Baker, Brenda F.

/ APPLICANT: McNeill, John

/ APPLICANT: Freier, Susan M.

/ APPLICANT: Sasnor, Henri M.

/ APPLICANT: Brooks, Douglas G.

/ APPLICANT: Ohashi, Cara

/ APPLICANT: Wyatt, Jacqueline R.

/ APPLICANT: Borchers, Alexander

/ APPLICANT: Vickers, Timothy A.

/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR

/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND

/ FILE REFERENCE: ISIS-4503

/ CURRENT APPLICATION NUMBER: US/10/388,263

/ NUMBER OF SEQ ID NOS: 947

/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 565

/ LENGTH: 20

/ TYPE: DNA  
/ ORGANISM: Artificial Sequence

/ FEATURE:

/ OTHER INFORMATION: Antisense Oligonucleotide

US-10-388-263-565

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1791 GGAGATAGCGACTGGCTGC 1810  
Db 20 GGAGATAGCGACTGGCTGC 1

RESULT 125  
US-10-388-263-566/c

/ Sequence 566, Application US/10388263  
/ Publication No. US20030228597A1

/ GENERAL INFORMATION:

/ APPLICANT: Cowsett, Lex M.

/ APPLICANT: Baker, Brenda F.

/ APPLICANT: McNeill, John

/ APPLICANT: Freier, Susan M.

/ APPLICANT: Sasnor, Henri M.

/ APPLICANT: Brooks, Douglas G.

/ APPLICANT: Ohashi, Cara

/ APPLICANT: Wyatt, Jacqueline R.

/ APPLICANT: Borchers, Alexander

/ APPLICANT: Vickers, Timothy A.

/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR

/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND

/ FILE REFERENCE: ISIS-4503

/ CURRENT APPLICATION NUMBER: US/10/388,263

/ NUMBER OF SEQ ID NOS: 947

/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 566

/ LENGTH: 20

/ TYPE: DNA

/ ORGANISM: Artificial Sequence

/ FEATURE:

/ OTHER INFORMATION: Antisense Oligonucleotide

US-10-388-263-566

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2331 GTGGACCACTTTGGCTATAC 2350  
Db 20 GTGGACCACTTTGGCTATAC 1

RESULT 126  
US-10-388-263-567/c

/ Sequence 567, Application US/10388263  
/ Publication No. US20030228597A1

/ GENERAL INFORMATION:

/ APPLICANT: Cowsett, Lex M.

/ APPLICANT: Baker, Brenda F.

/ APPLICANT: McNeill, John

/ APPLICANT: Freier, Susan M.

/ APPLICANT: Sasnor, Henri M.

/ APPLICANT: Brooks, Douglas G.

/ APPLICANT: Ohashi, Cara

/ APPLICANT: Wyatt, Jacqueline R.

/ APPLICANT: Borchers, Alexander

/ APPLICANT: Vickers, Timothy A.

/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR

/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND

/ FILE REFERENCE: ISIS-4503

/ CURRENT APPLICATION NUMBER: US/10/388,263

/ NUMBER OF SEQ ID NOS: 947

/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 567

/ LENGTH: 20

/ TYPE: DNA

/ ORGANISM: Artificial Sequence

/ FEATURE:

/ OTHER INFORMATION: Antisense Oligonucleotide



```

; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 567
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-567

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      2496 CATGACCTCCAGGCTCTGGG 2515
Db      20 CATGACCTCCAGGCTCTGGG 1

```

```

RESULT 127
US-10-388-263-568/c
; Sequence 568, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 568
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-568

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      2573 GGTGATCAGGAGGGCTCAA 2592
Db      20 GGTGATCAGGAGGGCTCAA 1

```

```

RESULT 128
US-10-388-263-569/c
; Sequence 569, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.

```

```

; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 569
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-569

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      2811 GCTAGAGTGGGCTCCAGAT 2830
Db      20 GCTAGAGTGGGCTCCAGAT 1

```

```

RESULT 129
US-10-388-263-570/c
; Sequence 570, Application US/10388263
; Publication No. US20030228597A1
; GENERAL INFORMATION:
; APPLICANT: Cowsett, Lex M.
; APPLICANT: Baker, Brenda F.
; APPLICANT: McNeill, John
; APPLICANT: Freiler, Susan M.
; APPLICANT: Sasnor, Henri M.
; APPLICANT: Brooks, Douglas G.
; APPLICANT: Ohashi, Cara
; APPLICANT: Wyatt, Jacqueline R.
; APPLICANT: Borchers, Alexander
; APPLICANT: Vickers, Timothy A.
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
; TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
; FILE REFERENCE: ISIS-4503
; CURRENT APPLICATION NUMBER: US/10/388,263
; CURRENT FILING DATE: 2003-03-12
; NUMBER OF SEQ ID NOS: 947
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 570
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-570

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      2842 TCTTCCACGAGTGGGCTCG 2861
Db      20 TCTTCCACGAGTGGGCTCG 1

```

```

RESULT 130
US-10-388-263-571/c
; Sequence 571, Application US/10388263
; Publication No. US20030228597A1

```

```
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ CURRENT FILING DATE: 2003-03-12
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 571
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-571
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3367 ATGATGATCTACTGAGGCG 3386
DB 20 ATGATGATCTACTGAGGCG 1
```

```
RESULT 131
US-10-388-263-572/C
/ Sequence 572, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ CURRENT FILING DATE: 2003-03-12
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 572
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-572
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3611 TTCCAAGAGGCTGCATGCG 3630
|||||
```

```
DB 20 TTCCAAGAGGCTGCATGCG 1
```

```
RESULT 132
US-10-388-263-573/C
/ Sequence 573, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ CURRENT FILING DATE: 2003-03-12
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 573
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-573
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3791 GACTTCCGGCAGCTGGGTT 3810
DB 20 GACTTCCGGCAGCTGGGTT 1
```

```
RESULT 133
US-10-388-263-574/C
/ Sequence 574, Application US/10388263
/ Publication No. US20030228597A1
/ GENERAL INFORMATION:
/ APPLICANT: Cowsett, Lex M.
/ APPLICANT: Baker, Brenda F.
/ APPLICANT: McNeill, John
/ APPLICANT: Freier, Susan M.
/ APPLICANT: Sasnor, Henri M.
/ APPLICANT: Brooks, Douglas G.
/ APPLICANT: Ohashi, Cara
/ APPLICANT: Wyatt, Jacqueline R.
/ APPLICANT: Borchers, Alexander
/ APPLICANT: Vickers, Timothy A.
/ TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR
/ TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND
/ TITLE OF INVENTION: GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION
/ FILE REFERENCE: ISIS-4503
/ CURRENT APPLICATION NUMBER: US/10/388,263
/ CURRENT FILING DATE: 2003-03-12
/ NUMBER OF SEQ ID NOS: 947
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 574
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-388-263-574
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3841 TTCAGAGGATCTCGGAGT 3860  
DB 20 TTCAGAGGATCTCGGAGT 1

RESULT 134  
US-10-388-263-575/c

; Sequence 575, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:  
; APPLICANT: Cowert, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasnor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Wyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388,263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 575  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-388-263-575

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4281 CTTGGGCTCTTACCAT 4300  
DB 20 CTTGGGCTCTTACCAT 1

RESULT 135  
US-10-388-263-576/c

; Sequence 576, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:  
; APPLICANT: Cowert, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasnor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Wyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388,263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 576  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-388-263-576

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4391 ATGTGATGGTCTTACGCC 4410  
DB 20 ATGTGATGGTCTTACGCC 1

RESULT 136

US-10-388-263-577/c  
; Sequence 577, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:  
; APPLICANT: Cowert, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasnor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Wyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; TITLE OF INVENTION: MODULATION BY OLIGONUCLEOTIDES AND  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388,263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 577  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-388-263-577

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4641 TGTCAAGGATCTTACAC 4660  
DB 20 TGTCAAGGATCTTACAC 1

RESULT 137

US-10-712-795-17/c  
; Sequence 17, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 17

LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-17

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATTCACCGGACCTGCGG 20  
DB 20 ATTCACCGGACCTGCGG 1

RESULT 138  
US-10-712-795-18/c  
Sequence 18, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 18  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-18

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 GGCTGAGTGGCTTCGGT 40  
DB 20 GGCTGAGTGGCTTCGGT 1

RESULT 139  
US-10-712-795-19/c  
Sequence 19, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 19  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-19

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 71 CAGGCGCGAGGCGAGGC 90  
DB 20 CAGGCGCGAGGCGAGGC 1

RESULT 140  
US-10-712-795-20/c  
Sequence 20, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 20  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-20

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 CCACCGCAGCTGGCGATGGA 133  
DB 20 CCACCGCAGCTGGCGATGGA 1

RESULT 141  
US-10-712-795-21/c  
Sequence 21, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 21  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-21

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 151 TGCTGGCGTGTGGCGCTG 170  
DB 20 TGCTGGCGTGTGGCGCTG 1

RESULT 142  
US-10-712-795-22/c

```

; Sequence 22, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 22
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-22

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      181 TGCTGCTGCTGCTGCGGCGC 200
Db      20 TGCTGCTGCTGCTGCGGCGC 1

```

```

RESULT 143
US-10-712-795-23/c
; Sequence 23, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 23
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-23

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      321 CCTGGGACTGCTGATTCAAG 340
Db      20 CTTGGGACTGCTGATTCAAG 1

```

```

RESULT 144
US-10-712-795-24/c
; Sequence 24, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234

```

```

; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 24
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-24

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      451 AGGCAAGCCTTGCTGAAG 470
Db      20 AGGCAAGCCTTGCTGAAG 1

```

```

RESULT 145
US-10-712-795-25/c
; Sequence 25, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-25

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      716 GGGCAATGTGGCAACAGAA 735
Db      20 GGGCAATGTGGCAACAGAA 1

```

```

RESULT 146
US-10-712-795-26/c
; Sequence 26, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 26
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:

```

```
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-26

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      911 CAGAGACACACCTCTCC 930
DB      20 CAGAGACACACCTCTCC 1

RESULT 147
US-10-712-795-27/c
; Sequence 27, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 27
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-27

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      951 AAGTATGGATGCTAGCACA 970
DB      20 AAGTATGGATGCTAGCACA 1

RESULT 148
US-10-712-795-28/c
; Sequence 28, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-28

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1041 AAGATGGCCTCGCATTTGA 1060
DB      20 AAGATGGCCTCGCATTTGA 1060

; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-29

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1231 CACAGCTGATGAGTGTC 1250
DB      20 CACAGCTGATGAGTGTC 1

RESULT 149
US-10-712-795-29/c
; Sequence 29, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-29

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1361 CACCTACCTGCTGCTCTGA 1380
DB      20 CACCTACCTGCTGCTCTGA 1

RESULT 151
US-10-712-795-31/c
; Sequence 31, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
```

```

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-31

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1561 GCACCTGGGATGAAGATTAC 1580
Db      20  GCACCTGGGATGAAGATTAC 1

```

```

RESULT 152
US-10-712-795-32/c
; Sequence 32, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 32
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-32

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1611 ATGGGCCCAACCATGAGCA 1630
Db      20  ATGGGCCCAACCATGAGCA 1

```

```

RESULT 153
US-10-712-795-33/c
; Sequence 33, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892

```

```

; SEQ ID NO 33
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-33

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      1791 GGAGATAGCGACTGCTGC 1810
Db      20  GGAGATAGCGACTGCTGC 1

```

```

RESULT 154
US-10-712-795-34/c
; Sequence 34, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-34

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy      2331 GTGACCACTTGGCTATAC 2350
Db      20  GTGACCACTTGGCTATAC 1

```

```

RESULT 155
US-10-712-795-35/c
; Sequence 35, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-35

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;

```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2496 CATGACCTCCAGCTCTGGG 2515

DB 20 CATGACCTCCAGCTCTGGG 1

RESULT 156

US-10-712-795-36/c

; Sequence 36, Application US/10712795

; Publication No. US20040214325A1

; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39662

; CURRENT APPLICATION NUMBER: US/10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 36

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-712-795-36

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2573 GGTGATCAGGAGGGCTCAA 2592

DB 20 GGTGATCAGGAGGGCTCAA 1

RESULT 157

US-10-712-795-37/c

; Sequence 37, Application US/10712795

; Publication No. US20040214325A1

; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39662

; CURRENT APPLICATION NUMBER: US/10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 37

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-712-795-37

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2811 GCTAGAGTGGGGTCCAGAT 2830

DB 20 GCTAGAGTGGGGTCCAGAT 1

RESULT 158

US-10-712-795-38/c

; Sequence 38, Application US/10712795

; Publication No. US20040214325A1

; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39662

; CURRENT APPLICATION NUMBER: US/10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 38

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-712-795-38

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2842 TCTTCACGAGTGGGCTGG 2861

DB 20 TCTTCACGAGTGGGCTGG 1

RESULT 159

US-10-712-795-39/c

; Sequence 39, Application US/10712795

; Publication No. US20040214325A1

; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39662

; CURRENT APPLICATION NUMBER: US/10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 39

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-712-795-39

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3367 ATGATGATCTACTGAGGC 3386

DB 20 ATGATGATCTACTGAGGC 1

RESULT 160

US-10-712-795-40/c

; Sequence 40, Application US/10712795

; Publication No. US20040214325A1

; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39662

; CURRENT APPLICATION NUMBER: US/10/712,795

; PRIOR FILING DATE: 2003-11-13



```
;; PRIOR APPLICATION NUMBER: US 60/426,234
;; PRIOR FILING DATE: 2002-11-13
;; PRIOR APPLICATION NUMBER: PCT/US03/15493
;; PRIOR FILING DATE: 2003-05-13
;; NUMBER OF SEQ ID NOS: 892
;; SEQ ID NO 40
;; LENGTH: 20
;; TYPE: DNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-40
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3611 TTCCAGAGGGGTGGCATGGC 3630
Db      20 TTCCAGAGGGGTGGCATGGC 1
```

```
RESULT 161
US-10-712-795-41/c
; Sequence 41, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-41
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3791 GACTTCCGGCAGCGTGGATT 3810
Db      20 GACTTCCGGCAGCGTGGATT 1
```

```
RESULT 162
US-10-712-795-42/c
; Sequence 42, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
;; FEATURE:
;; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-42
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3841 TTCCAGAGGCATCTGGAGT 3860
Db      20 TTCCAGAGGCATCTGGAGT 1
```

```
RESULT 163
US-10-712-795-43/c
; Sequence 43, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-43
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4281 CTTGGGCTCTTACCACAT 4300
Db      20 CTTGGGCTCTTACCACAT 1
```

```
RESULT 164
US-10-712-795-44/c
; Sequence 44, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-44
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4391 ATGTGATGGGTCTTACGCC 4410
```

```
Db      20 ATGTGATGGGTCTCTAGCC 1
|||||
RESULT 165
US-10-712-795-45/c
; Sequence 45, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-45

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      4641 TGTGAGGAGGATCTTAACAC 4660
Db      20 TGTGAGGAGGATCTTAACAC 1
|||||
RESULT 166
US-10-712-795-124/c
; Sequence 124, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 124
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-124

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      199 GCGCCAGGCGCGAAGAGAA 218
Db      20 GCGCCAGGCGCGAAGAGAA 1
|||||
RESULT 167
US-10-712-795-125/c
; Sequence 125, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 125
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-125

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      299 GGCTGAGAGTTCAGTGAG 318
Db      20 GGCTGAGAGTTCAGTGAG 1
|||||
RESULT 168
US-10-712-795-126/c
; Sequence 126, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 126
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-126

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      359 CTGCAAGTTGAGCTGAGG 378
Db      20 CTGCAAGTTGAGCTGAGG 1
|||||
RESULT 169
US-10-712-795-127/c
; Sequence 127, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 127
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-127
```

```
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 127
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-127
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      429 GAGGTGTATGCTTCAACCC 448
           |||||
DB      20 GAGGTGTATGCTTCAACCC 1
```

```
RESULT 170
US-10-712-795-128/c
; Sequence 128, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 128
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-128
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      509 CAGGTATGAGCTCAAGCTCG 528
           |||||
DB      20 CAGGTATGAGCTCAAGCTCG 1
```

```
RESULT 171
US-10-712-795-129/c
; Sequence 129, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 129
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-129
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      584 CATCTGAACATCAAGAGG 603
           |||||
DB      20 CATCTGAACATCAAGAGG 1
```

```
RESULT 172
US-10-712-795-130/c
; Sequence 130, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 130
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-130
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      669 ACCGTGTATGAACCTGCTC 688
           |||||
DB      20 ACCGTGTATGAACCTGCTC 1
```

```
RESULT 173
US-10-712-795-131/c
; Sequence 131, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 131
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-131
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      699 ACCGTCAAGCAGGAGGAGG 718
           |||||
DB      20 ACCGTCAAGCAGGAGGAGG 1
```

```
RESULT 174
US-10-712-795-132/c
; Sequence 132, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 132
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-132

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      756 GGGCAGTGTGATCGCTTCAA 775
Db      20 GGGCAGTGTGATCGCTTCAA 1

RESULT 175
US-10-712-795-133/c
; Sequence 133, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 133
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-133

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      799 CACTGCTCATCAAGGC 818
Db      20 CACTGCTCATCAAGGC 1

RESULT 176
US-10-712-795-134/c
; Sequence 134, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
```

```
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 134
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-134

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      869 CACACTGACGCTAAGAGA 888
Db      20 CACACTGACGCTAAGAGA 1

RESULT 177
US-10-712-795-135/c
; Sequence 135, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 135
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-135

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1179 CTGTTACTGAGCTGAGAG 1198
Db      20 CTGTTACTGAGCTGAGAG 1

RESULT 178
US-10-712-795-136/c
; Sequence 136, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 136
; LENGTH: 20
; TYPE: DNA
```

```
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-136
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1279 AGTGTGACAGCCTCAGTGC 1298
          |||||
DB      20 AGTGTGACAGCCTCAGTGC 1
```

```
RESULT 179
US-10-712-795-137/c
; Sequence 137, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 137
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-137
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1419 AACATGGCGAGGATCAGCG 1438
          |||||
DB      20 AACATGGCGAGGATCAGCG 1
```

```
RESULT 180
US-10-712-795-138/c
; Sequence 138, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 138
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-138
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1459 CGGTAGCCAGCGCGTCAAC 1478
          |||||
DB      20 CGGTAGCCAGCGCGTCAAC 1
```

```
RESULT 181
US-10-712-795-139/c
; Sequence 139, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 139
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-139
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1499 TACAGGAGCCAGAGAGCTGC 1518
          |||||
DB      20 TACAGGAGCCAGAGAGCTGC 1
```

```
RESULT 182
US-10-712-795-140/c
; Sequence 140, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 140
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-140
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1859 TGTCCTCAATCTACCATGGG 1878
          |||||
DB      20 TGTCCTCAATCTACCATGGG 1
```

```
RESULT 183
US-10-712-795-141/c
; Sequence 141, Application US/10712795
; Publication No. US20040214325A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 141
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-141
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2179 CAGCTGACCTCATCGAGATT 2198
Db 20 CAGCTGACCTCATCGAGATT 1
```

```
RESULT 184
US-10-712-795-142/C
; Sequence 142, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 142
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-142
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2299 GTCAAGTCTCTGATGGTGC 2318
Db 20 GTCAAGTCTCTGATGGTGC 1
```

```
RESULT 185
US-10-712-795-143/C
; Sequence 143, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
```

```
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 143
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-143
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2459 CCGCATCTTGGAGAGGAGC 2478
Db 20 CCGCATCTTGGAGAGGAGC 1
```

```
RESULT 186
US-10-712-795-144/C
; Sequence 144, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 144
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-144
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2518 AGCTGCTTCTGATGGGTGCC 2537
Db 20 AGCTGCTTCTGATGGGTGCC 1
```

```
RESULT 187
US-10-712-795-145/C
; Sequence 145, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 145
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-145
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2789 GGGCATCATTCGCGACT 2808  
DB 20 GGGCATCATTCGCGACT 1

RESULT 188  
US-10-712-795-146/c  
; Sequence 146, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 146  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-146

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2919 AGACGACGACGCTGCTGAG 2938  
DB 20 AGACGACGACGCTGCTGAG 1

RESULT 189  
US-10-712-795-147/c  
; Sequence 147, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 147  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-147

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3100 CCTACTATCCGCTGACCGGG 3119  
DB 20 CCTACTATCCGCTGACCGGG 1

RESULT 190  
US-10-712-795-148/c  
; Sequence 148, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 148  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-148

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3449 GGGCCACTTAAGTTGTGACA 3468  
DB 20 GGGCCACTTAAGTTGTGACA 1

RESULT 191  
US-10-712-795-149/c  
; Sequence 149, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 149  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-149

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3919 AGACATGGGATTCGACAGC 3938  
DB 20 AGACATGGGATTCGACAGC 1

RESULT 192  
US-10-712-795-150/c  
; Sequence 150, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662

```
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 150
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-150

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4089 CTCGACTTCAAGTCTGTGGG 4108
Db      20 CTCGACTTCAAGTCTGTGGG 1

RESULT 193
US-10-712-795-151/c
; Sequence 151, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 151
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-151

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      4579 TCAAGATTGATGGGCACTTC 4598
Db      20 TCAAGATTGATGGGCACTTC 1

RESULT 194
US-10-712-795-185/c
; Sequence 185, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 185
; LENGTH: 20
```

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-185

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      229 ATGTGAGCTGTGTCTGTCCA 248
Db      20 ATGTGAGCTGTGTCTGTCCA 1

RESULT 195
US-10-712-795-186/c
; Sequence 186, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 186
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-186

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      269 GCACCTCCGAGATACACAT 288
Db      20 GCACCTCCGAGATACACAT 1

RESULT 196
US-10-712-795-187/c
; Sequence 187, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 187
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-187

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```



```
QY      389 CTGACGCTTCATCTGAGA 408
      |||||
Db      20 CTGACGCTTCATCTGAGA 1

RESULT 197
US-10-712-795-188/c
; Sequence 188, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 188
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-188

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      449 TGAGGGCAAGCCTTGCTGA 468
      |||||
Db      20 TGAGGGCAAGCCTTGCTGA 1

RESULT 198
US-10-712-795-189/c
; Sequence 189, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 189
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-189

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      529 CCATTCGAGGAGGAGCAG 548
      |||||
Db      20 CCATTCGAGGAGGAGCAG 1

RESULT 199
US-10-712-795-190/c
; Sequence 190, Application US/10712795
```

```
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 190
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-190

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      709 CGAGGAAGGCAATGTGCA 728
      |||||
Db      20 CGAGGAAGGCAATGTGCA 1

RESULT 200
US-10-712-795-191/c
; Sequence 191, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 191
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-191

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      829 CCTGTCACTCTGATCAGC 848
      |||||
Db      20 CCTGTCACTCTGATCAGC 1

RESULT 201
US-10-712-795-192/c
; Sequence 192, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
```

```
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 192
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-192
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 849 AGCAGCCAGTCCTCTCAGTA 868
Db 20 AGCAGCCAGTCCTCTCAGTA 1
```

```
RESULT 202
US-10-712-795-193/C
; Sequence 193, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 193
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-193
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 889 AGCATGTGCGAAGCCATC 908
Db 20 AGCATGTGCGAAGCCATC 1
```

```
RESULT 203
US-10-712-795-194/C
; Sequence 194, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 194
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
```

```
US-10-712-795-194
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1059 GAGAGCACCMAATCCACATC 1078
Db 20 GAGAGCACCMAATCCACATC 1
```

```
RESULT 204
US-10-712-795-195/C
; Sequence 195, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 195
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-195
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1199 CCTCAGTGAATGAGCAGTCA 1218
Db 20 CCTCAGTGAATGAGCAGTCA 1
```

```
RESULT 205
US-10-712-795-196/C
; Sequence 196, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 196
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-196
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1349 GATAGATGTGTCACCTACC 1368
Db 20 GATAGATGTGTCACCTACC 1
```

```

RESULT 206
US-10-712-795-197/c
; Sequence 197, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 197
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-197

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

OY      1390 CCTCAGCAGCAGCAGCTGCGA 1409
DB      20 CCTCAGCAGCAGCAGCTGCGA 1

```

```

RESULT 207
US-10-712-795-198/c
; Sequence 198, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 198
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-198

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

OY      1589 GATTCGCGGGTCTATTGGAA 1608
DB      20 GATTCGCGGGTCTATTGGAA 1

```

```

RESULT 208
US-10-712-795-199/c
; Sequence 199, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

```

```

; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 199
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-199

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

OY      1678 CAAAGCATCATCATGATGATC 1697
DB      20 CAAAGCATCATCATGATGATC 1

```

```

RESULT 209
US-10-712-795-200/c
; Sequence 200, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 200
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-200

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

OY      1699 AGAAGCTGCCATCCAGGCT 1718
DB      20 AGAAGCTGCCATCCAGGCT 1

```

```

RESULT 210
US-10-712-795-201/c
; Sequence 201, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 201

```

; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-201

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1749 CAGGAGTTCTTCTTCAGAC 1768  
DB 20 CAGGAGTTCTTCTTCAGAC 1

RESULT 211  
US-10-712-795-202/c  
; Sequence 202, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 992  
; SEQ ID NO 202  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-202

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1829 GAGTCTTCACAGCAGATA 1848  
DB 20 GAGTCTTCACAGCAGATA 1

RESULT 212  
US-10-712-795-203/c  
; Sequence 203, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 203  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-203

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1919 TGCCATATCTTGAAGTCAAG 1938  
DB 20 TGCCATATCTTGAAGTCAAG 1

RESULT 213  
US-10-712-795-204/c  
; Sequence 204, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 204  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-204

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2189 CATCGAGATTGGCTTGAAG 2208  
DB 20 CATCGAGATTGGCTTGAAG 1

RESULT 214  
US-10-712-795-205/c  
; Sequence 205, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 205  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-205

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2649 GGAGCTGATTAAGTTGCA 2668  
DB 20 GGAGCTGATTAAGTTGCA 1

RESULT 215  
US-10-712-795-206/c

```
; Sequence 206, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 206
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-206
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2729 CAACATGCGGCTGAAGCTGG 2748
Db 20 CAACATGCGGCTGAAGCTGG 1
```

```
RESULT 216
US-10-712-795-207/c
; Sequence 207, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 207
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-207
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2949 ACATTACATTGGCTCTAC 2968
Db 20 ACATTACATTGGCTCTAC 1
```

```
RESULT 217
US-10-712-795-208/c
; Sequence 208, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 208
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-208
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 3059 CTCAGGCGCTTACTCCACG 3078
Db 20 CTCAGGCGCTTACTCCACG 1
```

```
RESULT 218
US-10-712-795-209/c
; Sequence 209, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 209
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-209
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 3118 GGGACACAGATTAGAGCTG 3137
Db 20 GGGACACAGATTAGAGCTG 1
```

```
RESULT 219
US-10-712-795-210/c
; Sequence 210, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 210
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-210

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3189 GAGCTCCAGAGAGAGACAG 3208  
DB 20 GAGCTCCAGAGAGAGACAG 1

RESULT 220  
US-10-712-795-211/c  
; Sequence 211, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 211  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-211

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3289 ATCGGACAGCTATGACCTTG 3308  
DB 20 ATCGGACAGCTATGACCTTG 1

RESULT 221  
US-10-712-795-212/c  
; Sequence 212, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 212  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-212

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3488 CAAGGCTGTTATTCATAC 3507  
|||||

DB 20 CAAGGCTGTTATTCATAC 1

RESULT 222  
US-10-712-795-213/c  
; Sequence 213, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 213  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-213

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3579 GACTCATCTGCTACAGCTTA 3598  
DB 20 GACTCATCTGCTACAGCTTA 1

RESULT 223  
US-10-712-795-214/c  
; Sequence 214, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 214  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-214

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4039 GCAATCTCTCCAGAGATCTA 4058  
DB 20 GCAATCTCTCCAGAGATCTA 1

RESULT 224  
US-10-712-795-215/c  
; Sequence 215, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.

```
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 215
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-215
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4180 CTCTCTGGGTGTTCTAGAC 4199
          |||||
DB       20 CTCTCTGGGTGTTCTAGAC 1
```

```
RESULT 225
US-10-712-795-216/c
; Sequence 216, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 216
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-216
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4299 ATGAAGGCTGACTGTGTGT 4318
          |||||
DB       20 ATGAAGGCTGACTGTGTGT 1
```

```
RESULT 226
US-10-712-795-217/c
; Sequence 217, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
```

```
; SEQ ID NO 217
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-217
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4511 GGGACACAGATGTGCTT 4530
          |||||
DB       20 GGGACACAGATGTGCTT 1
```

```
RESULT 227
US-10-712-795-218/c
; Sequence 218, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 218
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-218
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4660 CTGCCCGCTCAATGAGAG 4679
          |||||
DB       20 CTGCCCGCTCAATGAGAG 1
```

```
RESULT 228
US-10-712-795-219/c
; Sequence 219, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 219
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-219
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4919 GCTGCGTTCTGAATATCAGG 4938  
|||||

Db 20 GCTGCGTTCTGAATATCAGG 1

## RESULT 229

US-10-712-795-247/c  
; Sequence 247, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 247  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-247

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3249 GGTCGAAGCAGACTGAGGC 3268  
|||||

Db 20 GGTCGAAGCAGACTGAGGC 1

## RESULT 230

US-10-712-795-248/c  
; Sequence 248, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 248  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-248

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 TCCACCGGGGACCTCGGGGG 22  
|||||

Db 20 TCCACCGGGGACCTCGGGGG 1

## RESULT 231

US-10-712-795-249/c  
; Sequence 249, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 249  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-249

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 CACCGGACCTCGGGGCTG 25  
|||||

Db 20 CACCGGACCTCGGGGCTG 1

## RESULT 232

US-10-712-795-250/c  
; Sequence 250, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 250  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-250

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 CTGAGTGCCCTTCTCGGTTG 42  
|||||

Db 20 CTGAGTGCCCTTCTCGGTTG 1

## RESULT 233

US-10-712-795-251/c  
; Sequence 251, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13



```

; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 251
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-251
```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy 35 CTCGGTGTGCTGCCGCTGAGG 54
Db 20 CTCGGTGTGCTGCCGCTGAGG 1
```

```

RESULT 234
US-10-712-795-252/c
; Sequence 252, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 252
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-252
```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy 36 TCGGTTGCTGCCGCTGAGGA 55
Db 20 TCGGTTGCTGCCGCTGAGGA 1
```

```

RESULT 235
US-10-712-795-253/c
; Sequence 253, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 253
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```

; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-253
```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy 37 CGGTTGCTGCCGCTGAGGAG 56
Db 20 CGGTTGCTGCCGCTGAGGAG 1
```

```

RESULT 236
US-10-712-795-254/c
; Sequence 254, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 254
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-254
```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy 39 GTTGCTGCCGCTGAGAGCC 58
Db 20 GTTGCTGCCGCTGAGAGCC 1
```

```

RESULT 237
US-10-712-795-255/c
; Sequence 255, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 255
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-255
```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy 43 CTCGCCGTGAGGAGCCGCC 62
```

```
Db      20 CTCGCCCTGAGAGCCCGCC 1
|||||
RESULT 238
US-10-712-795-256/c
; Sequence 256, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 256
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-256

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      116 ACCGACGCTGCGCATGAGCC 135
|||||
Db      20 ACCGACGCTGCGCATGAGCC 1
|||||
```

```
RESULT 239
US-10-712-795-257/c
; Sequence 257, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 257
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-257
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      120 CAGCTGCGATGAGACCGCC 139
|||||
Db      20 CAGCTGCGATGAGACCGCC 1
|||||
```

```
RESULT 240
US-10-712-795-285/c
; Sequence 285, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 285
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-285
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3230 GTTGTACTCAAGCAGAG 3249
|||||
Db      20 GTTGTACTCAAGCAGAG 1
|||||
```

```
RESULT 241
US-10-712-795-286/c
; Sequence 286, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 286
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-286
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3232 TTGTACTCAAGCAGAGT 3251
|||||
Db      20 TTGTACTCAAGCAGAGT 1
|||||
```

```
RESULT 242
US-10-712-795-287/c
; Sequence 287, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
```

```
NUMBER OF SEQ ID NOS: 892
; SEQ ID NO: 287
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-287
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3234 GTAACGACGAGAGGTGC 3253
Db      20 GTAACGACGAGAGGTGC 1
```

```
RESULT 243
US-10-712-795-288/c
; Sequence 288, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO: 288
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-288
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3236 AACTCAAGCAGAGGTGCGA 3255
Db      20 AACTCAAGCAGAGGTGCGA 1
```

```
RESULT 244
US-10-712-795-289/c
; Sequence 289, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO: 289
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-289
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3238 CTCAGCAGAGGTGCGAG 3257
Db      20 CTCAGCAGAGGTGCGAG 1
```

```
RESULT 245
US-10-712-795-290/c
; Sequence 290, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO: 290
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-290
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3240 CAAGCAGAGGTGCGAGCA 3259
Db      20 CAAGCAGAGGTGCGAGCA 1
```

```
RESULT 246
US-10-712-795-291/c
; Sequence 291, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO: 291
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-291
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3242 AGCAGAGGTGCGAGCAGA 3261
Db      20 AGCAGAGGTGCGAGCAGA 1
```

```
RESULT 247
US-10-712-795-292/c
; Sequence 292, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 292
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-292

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3244 CAGAGGTGCGAAGCAGACT 3263
Db      20 CAGAGGTGCGAAGCAGACT 1

RESULT 248
US-10-712-795-293/c
; Sequence 293, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 293
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-293

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3246 GAAAGTGCAGAGCAGACTGA 3265
Db      20 GAAAGTGCAGAGCAGACTGA 1

RESULT 249
US-10-712-795-294/c
; Sequence 294, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
```

```
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 294
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-294

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3248 AGGTGCGAAGCAGACTGAGG 3267
Db      20 AGGTGCGAAGCAGACTGAGG 1

RESULT 250
US-10-712-795-295/c
; Sequence 295, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 295
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-295

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3250 GTGCGAAGCAGACTGAGGCT 3269
Db      20 GTGCGAAGCAGACTGAGGCT 1

RESULT 251
US-10-712-795-296/c
; Sequence 296, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 296
; LENGTH: 20
; TYPE: DNA
```

```
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-296
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3252 GCGAGCAGACTGAGGCTTAC 3271
DB      20 GCGAGCAGACTGAGGCTTAC 1
```

```
RESULT 252
US-10-712-795-297/c
; Sequence 297, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 297
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-297
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3254 GAACGAGCTGAGGCTACCA 3273
DB      20 GAACGAGCTGAGGCTACCA 1
```

```
RESULT 253
US-10-712-795-298/c
; Sequence 298, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 298
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-298
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3256 AGCAGCTGAGGCTACCATG 3275
DB      20 AGCAGCTGAGGCTACCATG 1
```

```
RESULT 254
US-10-712-795-299/c
; Sequence 299, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 299
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-299
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3258 CAGACTGAGGCTTCCATGAC 3277
DB      20 CAGACTGAGGCTTCCATGAC 1
```

```
RESULT 255
US-10-712-795-300/c
; Sequence 300, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 300
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-300
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3260 GACTGAGCTTACCATGACAT 3279
DB      20 GACTGAGCTTACCATGACAT 1
```

```
RESULT 256
US-10-712-795-301/c
; Sequence 301, Application US/10712795
; Publication No. US20040214325A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 301
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-301

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3262 CTGAGCTACCATGACATTC 3281
Db      20 CTGAGCTACCATGACATTC 1

RESULT 257
US-10-712-795-302/c
; Sequence 302, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 302
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-302

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3264 GAGGCTACCATGACATTC 3283
Db      20 GAGGCTACCATGACATTC 1

RESULT 258
US-10-712-795-303/c
; Sequence 303, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
```

```
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 303
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-303

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3266 GGCTACCATGACATTC 3285
Db      20 GGCTACCATGACATTC 1

RESULT 259
US-10-712-795-304/c
; Sequence 304, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 304
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-304

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3268 CTACCATGACATTC 3287
Db      20 CTACCATGACATTC 1

RESULT 260
US-10-712-795-514/c
; Sequence 514, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 514
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-514
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3254 GAAGCAGACTGAGGCTACCA 3273  
|||||  
DB 20 GAAGCAGACTGAGGCTACCA 1

RESULT 261  
US-10-712-795-516  
; Sequence 516, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 516  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-516

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 199 GCGCCAGGCGCCGAAGAGGAA 218  
|||||  
DB 1 GCGCCAGGCGCCGAAGAGGAA 20

RESULT 262  
US-10-712-795-517  
; Sequence 517, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 517  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-517

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 509 CAGGTATGAGCTCAAGCTGG 528  
|||||  
DB 1 CAGGTATGAGCTCAAGCTGG 20

RESULT 263  
US-10-712-795-518  
; Sequence 518, Application US/10712795

; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 518  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-518

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 584 CATCTGACATCAAGAGG 603  
|||||  
DB 1 CATCTGACATCAAGAGG 20

RESULT 264  
US-10-712-795-519  
; Sequence 519, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 519  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-519

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 756 GGGCAGTGTGATCGCTTCA 775  
|||||  
DB 1 GGGCAGTGTGATCGCTTCA 20

RESULT 265  
US-10-712-795-520  
; Sequence 520, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 520

LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-520

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 799 CACTGCTCATCAAGGC 818  
DB 1 CACTGCTCATCAAGGC 20

RESULT 266  
US-10-712-795-521  
Sequence 521, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 521  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-521

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 869 CACACTGACGCTAAGGA 888  
DB 1 CACACTGACGCTAAGGA 20

RESULT 267  
US-10-712-795-522  
Sequence 522, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 522  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-522

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1459 CGCTGACCAACGGCTCAAC 1478  
DB 1 CGCTGACCAACGGCTCAAC 20

RESULT 268  
US-10-712-795-523  
Sequence 523, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 523  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-523

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1859 TGTCGAATTCTACATGGG 1878  
DB 1 TGTCGAATTCTACATGGG 20

RESULT 269  
US-10-712-795-524  
Sequence 524, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 524  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-524

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2179 CAGCTGACCTCATCGAGATT 2198  
DB 1 CAGCTGACCTCATCGAGATT 20

RESULT 270  
US-10-712-795-525  
Sequence 525, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13



; PRIOR APPLICATION NUMBER: PCT/US03/15493  
 ; PRIOR FILING DATE: 2003-05-13  
 ; NUMBER OF SEQ ID NOS: 892  
 ; SEQ ID NO 525  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: H. sapiens  
 US-10-712-795-525

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2239 GTCAAGTTCCTGATGATGTC 2318  
 Db 1 GTCAAGTTCCTGATGATGTC 20

RESULT 271  
 US-10-712-795-526  
 ; Sequence 526, Application US/10712795  
 ; Publication No. US20040214325A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Crooke et al.  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
 ; FILE REFERENCE: 30566/39662  
 ; CURRENT APPLICATION NUMBER: US/10/712,795  
 ; CURRENT FILING DATE: 2003-11-13  
 ; PRIOR APPLICATION NUMBER: US 60/426,234  
 ; PRIOR FILING DATE: 2002-11-13  
 ; PRIOR APPLICATION NUMBER: PCT/US03/15493  
 ; PRIOR FILING DATE: 2003-05-13  
 ; NUMBER OF SEQ ID NOS: 892  
 ; SEQ ID NO 526  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: H. sapiens  
 US-10-712-795-526

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2518 AGCTGCTTCGATGATGATGCC 2537  
 Db 1 AGCTGCTTCGATGATGATGCC 20

RESULT 272  
 US-10-712-795-527  
 ; Sequence 527, Application US/10712795  
 ; Publication No. US20040214325A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Crooke et al.  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
 ; FILE REFERENCE: 30566/39662  
 ; CURRENT APPLICATION NUMBER: US/10/712,795  
 ; CURRENT FILING DATE: 2003-11-13  
 ; PRIOR APPLICATION NUMBER: US 60/426,234  
 ; PRIOR FILING DATE: 2002-11-13  
 ; PRIOR APPLICATION NUMBER: PCT/US03/15493  
 ; PRIOR FILING DATE: 2003-05-13  
 ; NUMBER OF SEQ ID NOS: 892  
 ; SEQ ID NO 527  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: H. sapiens  
 US-10-712-795-527

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2789 GGGCATCATCATTCGGACT 2808  
 Db 1 GGGCATCATCATTCGGACT 20

RESULT 273  
 US-10-712-795-528  
 ; Sequence 528, Application US/10712795  
 ; Publication No. US20040214325A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Crooke et al.  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
 ; FILE REFERENCE: 30566/39662  
 ; CURRENT APPLICATION NUMBER: US/10/712,795  
 ; CURRENT FILING DATE: 2003-11-13  
 ; PRIOR APPLICATION NUMBER: US 60/426,234  
 ; PRIOR FILING DATE: 2002-11-13  
 ; PRIOR APPLICATION NUMBER: PCT/US03/15493  
 ; PRIOR FILING DATE: 2003-05-13  
 ; NUMBER OF SEQ ID NOS: 892  
 ; SEQ ID NO 528  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: H. sapiens  
 US-10-712-795-528

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3100 CCTACTATCCGCTGACCGGG 3119  
 Db 1 CCTACTATCCGCTGACCGGG 20

RESULT 274  
 US-10-712-795-529  
 ; Sequence 529, Application US/10712795  
 ; Publication No. US20040214325A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Crooke et al.  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
 ; FILE REFERENCE: 30566/39662  
 ; CURRENT APPLICATION NUMBER: US/10/712,795  
 ; CURRENT FILING DATE: 2003-11-13  
 ; PRIOR APPLICATION NUMBER: US 60/426,234  
 ; PRIOR FILING DATE: 2002-11-13  
 ; PRIOR APPLICATION NUMBER: PCT/US03/15493  
 ; PRIOR FILING DATE: 2003-05-13  
 ; NUMBER OF SEQ ID NOS: 892  
 ; SEQ ID NO 529  
 ; LENGTH: 20  
 ; TYPE: DNA  
 ; ORGANISM: H. sapiens  
 US-10-712-795-529

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3449 GGGCCACCTTAAGTTGTGACA 3468  
 Db 1 GGGCCACCTTAAGTTGTGACA 20

RESULT 275  
 US-10-712-795-530  
 ; Sequence 530, Application US/10712795  
 ; Publication No. US20040214325A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Crooke et al.  
 ; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
 ; FILE REFERENCE: 30566/39662

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; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 530
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-530

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0;

QY 3919 AGAACAATGGGATTGCCAGAC 3938
DB 1 AGAACAATGGGATTGCCAGAC 20

RESULT 276
US-10-712-795-531
; Sequence 531, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 531
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-531

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0;

QY 4089 CTCACCTCAAGTCTGTGGG 4108
DB 1 CTCACCTCAAGTCTGTGGG 20

RESULT 277
US-10-712-795-553
; Sequence 553, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 553
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-553
```

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Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0;

QY 229 ATGTCAAGCTGTGTGTCCA 248
DB 1 ATGTCAAGCTGTGTGTCCA 20

RESULT 278
US-10-712-795-554
; Sequence 554, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 554
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-554

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0;

QY 269 GCACCTCCGGAAGTACACAT 288
DB 1 GCACCTCCGGAAGTACACAT 20

RESULT 279
US-10-712-795-555
; Sequence 555, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 555
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-555

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0;

QY 389 CTCAGCTTCATCTGTAGA 408
DB 1 CTCAGCTTCATCTGTAGA 20

RESULT 280
US-10-712-795-556
; Sequence 556, Application US/10712795
; Publication No. US20040214325A1
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; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 556
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-556

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Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      449 TGAGGCAAGCCTTGCTGA 468
Db      1 TGAGGCAAGCCTTGCTGA 20

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RESULT 281
US-10-712-795-557
; Sequence 557, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 557
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-557

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

QY      529 CCATTCAGAGGAGCAG 548
Db      1 CCATTCAGAGGAGCAG 20

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RESULT 282
US-10-712-795-558
; Sequence 558, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 558
; LENGTH: 20

```

```

; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-558

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      709 CGAGGAGGCGCATGTGGCA 728
Db      1 CGAGGAGGCGCATGTGGCA 20

```

```

RESULT 283
US-10-712-795-559
; Sequence 559, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 559
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-559

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      829 CCTGTCACTCGATCAGC 848
Db      1 CCTGTCACTCGATCAGC 20

```

```

RESULT 284
US-10-712-795-560
; Sequence 560, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 560
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-560

```

```

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      849 AGCAGCCAGTCTGTCACTA 868
Db      1 AGCAGCCAGTCTGTCACTA 20

```

```
RESULT 285
US-10-712-795-561
; Sequence 561, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 561
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-561

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 889 AGCATGTGCGAAGCCATC 908
DB 1 AGCATGTGCGAAGCCATC 20

RESULT 286
US-10-712-795-562
; Sequence 562, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 562
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-562

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1059 GAGAGCACCACCAATTCACATC 1078
DB 1 GAGAGCACCACCAATTCACATC 20

RESULT 287
US-10-712-795-563
; Sequence 563, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 563
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-563

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1349 GATGATGTGCTACCTACC 1368
DB 1 GATGATGTGCTACCTACC 20

RESULT 288
US-10-712-795-564
; Sequence 564, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 564
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-564

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1199 CCTCAGTGTGAGCAGTCA 1218
DB 1 CCTCAGTGTGAGCAGTCA 20

RESULT 289
US-10-712-795-565
; Sequence 565, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 565
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-565

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1390 CTCGACGACGAGCTGCGA 1409
```

```
Db      1 CCTGACGACGAGCTGCGA 20
|||||
RESULT 290
US-10-712-795-566
; Sequence 566, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 566
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-566

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1589 GATTCGGCGGTCATTGGAA 1608
|||||
Db      1 GATTCGGCGGTCATTGGAA 20

RESULT 291
US-10-712-795-567
; Sequence 567, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 567
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-567

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1678 CAAAGCCATCATGTGATGC 1697
|||||
Db      1 CAAAGCCATCATGTGATGC 20

RESULT 292
US-10-712-795-568
; Sequence 568, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
```

```
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 568
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-568

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1699 AGAAGCTGCCATCCAGGCT 1718
|||||
Db      1 AGAAGCTGCCATCCAGGCT 20

RESULT 293
US-10-712-795-569
; Sequence 569, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 569
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-569

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1749 CAGGAGTCTTCTTCAGAC 1768
|||||
Db      1 CAGGAGTCTTCTTCAGAC 20

RESULT 294
US-10-712-795-570
; Sequence 570, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 570
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-570

Query Match      0.1%; Score 20; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1829 GAGTCCTCACGACGATA 1848

Db 1 GAGTCCTCACGACGATA 20

RESULT 295

US-10-712-795-571  
; Sequence 571, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 571

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-571

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCATATCTTGAAGTCTGAG 1938

Db 1 TGCCATATCTTGAAGTCTGAG 20

RESULT 296

US-10-712-795-572  
; Sequence 572, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 572

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-572

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2189 CATGAGATTGGCTTGAAG 2208

Db 1 CATGAGATTGGCTTGAAG 20

RESULT 297

US-10-712-795-573  
; Sequence 573, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 575

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-573

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 573

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-573

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2649 GGAGCTGATTACAGTTGCA 2668

Db 1 GGAGCTGATTACAGTTGCA 20

RESULT 298

US-10-712-795-574  
; Sequence 574, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 574

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-574

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2729 CAACATGACGGCTGAAGTGG 2748

Db 1 CAACATGACGGCTGAAGTGG 20

RESULT 299

US-10-712-795-575  
; Sequence 575, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39662

CURRENT APPLICATION NUMBER: US/10/712,795

CURRENT FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-05-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 575

LENGTH: 20

TYPE: DNA

ORGANISM: H. sapiens

US-10-712-795-575

```
; ORGANISM: H. sapiens
US-10-712-795-575

Query Match
  0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2949 ACATTACATTGGTCTCTAC 2968
DB 1 ACATTACATTGGTCTCTAC 20

RESULT 300
US-10-712-795-576
; Sequence 576, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 576
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-576

Query Match
  0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3059 CTCAGCGCTTACTCCACG 3078
DB 1 CTCAGCGCTTACTCCACG 20

RESULT 301
US-10-712-795-577
; Sequence 577, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 577
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-577

Query Match
  0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3118 GGCACCAAGTATGAGCTG 3137
DB 1 GGCACCAAGTATGAGCTG 20

RESULT 302
US-10-712-795-578
; Sequence 578, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 578
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-578

Query Match
  0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3189 GAGCTCCAGAGAGAGACAG 3208
DB 1 GAGCTCCAGAGAGAGACAG 20

RESULT 303
US-10-712-795-579
; Sequence 579, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 579
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-579

Query Match
  0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3289 ATCGGCGAGTATGACCTTG 3308
DB 1 ATCGGCGAGTATGACCTTG 20

RESULT 304
US-10-712-795-580
; Sequence 580, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
```

; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 580  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-580

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3488 CAAGGCTGTTATTTCCATAC 3507  
Db 1 CAAGGCTGTTATTTCCATAC 20

RESULT 305  
US-10-712-795-581  
; Sequence 581, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 581  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-581

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3579 GACTCATCTGCTACAGCTTA 3598  
Db 1 GACTCATCTGCTACAGCTTA 20

RESULT 306  
US-10-712-795-582  
; Sequence 582, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 582  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-582

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4039 GCAATCCTCCAGAGATCTA 4058  
|||||

Db 1 GCAATCCTCCAGAGATCTA 20

RESULT 307  
US-10-712-795-583  
; Sequence 583, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 583  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-583

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4180 CTCTCCTGGGTTCTTAGAC 4199  
Db 1 CTCTCCTGGGTTCTTAGAC 20

RESULT 308  
US-10-712-795-584  
; Sequence 584, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 584  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-584

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4299 ATGAAGGCTGACTCTGTGTT 4318  
Db 1 ATGAAGGCTGACTCTGTGTT 20

RESULT 309  
US-10-712-795-585  
; Sequence 585, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13



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; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 585
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-585

```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 4511 GGGACCAAGATGTCTGCTT 4530
Db 1 GGGACCAAGATGTCTGCTT 20

```

```

RESULT 310
US-10-712-795-586
; Sequence 586, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 586
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-586

```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 4660 CTGGCCGCGCTCAATGAGAG 4679
Db 1 CTGGCCGCGCTCAATGAGAG 20

```

```

RESULT 311
US-10-712-795-587
; Sequence 587, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 587
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-587

```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 4919 GGTGCGTTCTGAATATCAGG 4938
Db 1 GGTGCGTTCTGAATATCAGG 20

```

```

RESULT 312
US-10-712-795-614
; Sequence 614, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 614
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-614

```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 3249 GGTGCGAAGCAGCTGAGGC 3268
Db 1 GGTGCGAAGCAGCTGAGGC 20

```

```

RESULT 313
US-10-712-795-615
; Sequence 615, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 615
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-615

```

```

Query Match
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 3 TCCACCGGAGCTGGCGGG 22
Db 1 TCCACCGGAGCTGGCGGG 20

```

```

RESULT 314
US-10-712-795-616
; Sequence 616, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.

```

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; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 616
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-616

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      6 CACCGGAGCTGGCGGCGCTG 25
Db      1 CACCGGAGCTGGCGGCGCTG 20

RESULT 315
US-10-712-795-617
; Sequence 617, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 617
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-617

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      23 CTGAGTCCCTTCTCGGTTG 42
Db      1 CTGAGTCCCTTCTCGGTTG 20

RESULT 316
US-10-712-795-618
; Sequence 618, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 618
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens

US-10-712-795-619

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      35 CTGGTTGCTGCCGCTGAGG 54
Db      1 CTGGTTGCTGCCGCTGAGG 20

RESULT 317
US-10-712-795-619
; Sequence 619, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 619
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-619

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      36 TCGGTTGCTGCCGCTGAGGA 55
Db      1 TCGGTTGCTGCCGCTGAGGA 20

RESULT 318
US-10-712-795-620
; Sequence 620, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 620
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-620

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      37 CGGTGCTGCCGCTGAGAG 56
Db      1 CGGTGCTGCCGCTGAGAG 20

RESULT 319
US-10-712-795-621
```

```
; Sequence 621, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 621
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-621
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 39 GTTGCTGCCGCTGAGGAGCC 58
Db 1 GTTGCTGCCGCTGAGGAGCC 20
```

```
RESULT 320
US-10-712-795-622
; Sequence 622, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 622
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-622
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 43 CTGCCGCTGAGGAGCCGCC 62
Db 1 CTGCCGCTGAGGAGCCGCC 20
```

```
RESULT 321
US-10-712-795-623
; Sequence 623, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
```

```
; SEQ ID NO 623
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-623
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 116 ACCGACGCTGCATGAGCC 135
Db 1 ACCGACGCTGCATGAGCC 20
```

```
RESULT 322
US-10-712-795-624
; Sequence 624, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 624
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-624
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 120 CAGCTGCATGAGCCGCC 139
Db 1 CAGCTGCATGAGCCGCC 20
```

```
RESULT 323
US-10-712-795-651
; Sequence 651, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 651
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-651
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3230 GTTGTAACTCAAGCAGAG 3249
Db 1 GTTGTAACTCAAGCAGAG 20
```

```
RESULT 324
US-10-712-795-652
; Sequence 652, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 652
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-652

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGCAGAGGAGT 3251
DB 1 TTGTAAGCAGAGGAGT 20

RESULT 325
US-10-712-795-653
; Sequence 653, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 653
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-653

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3234 GTAACTCAAGCAGAGGTGC 3253
DB 1 GTAACTCAAGCAGAGGTGC 20

RESULT 326
US-10-712-795-654
; Sequence 654, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 654
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-654

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3236 AACTCAAGCAGAGGTGCGA 3255
DB 1 AACTCAAGCAGAGGTGCGA 20

RESULT 327
US-10-712-795-655
; Sequence 655, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 655
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-655

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3238 CTCAGCAGAGGTGCGAAG 3257
DB 1 CTCAGCAGAGGTGCGAAG 20

RESULT 328
US-10-712-795-656
; Sequence 656, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 656
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-656

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      3240 CAAGCAGAGTGCGAAGCA 3259
|||
Db      1 CAAGCAGAGTGCGAAGCA 20

RESULT 329
US-10-712-795-657
; Sequence 657, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 657
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-657

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      3242 AGCAGAGTGCGAAGCAGA 3261
|||
Db      1 AGCAGAGTGCGAAGCAGA 20

RESULT 330
US-10-712-795-658
; Sequence 658, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 658
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-658

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      3244 CAGAGGTGGAGACGACT 3263
|||
Db      1 CAGAGGTGGAGACGACT 20

RESULT 331
US-10-712-795-659
; Sequence 659, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 659
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-659

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      3246 GAAGTGCGAAGCAGCTGA 3265
|||
Db      1 GAAGTGCGAAGCAGCTGA 20

RESULT 332
US-10-712-795-660
; Sequence 660, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 660
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-660

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      3248 AGGTGCGAAGCAGACTGAG 3267
|||
Db      1 AGGTGCGAAGCAGACTGAG 20

RESULT 333
US-10-712-795-661
; Sequence 661, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 661
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-661

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3250 GTGGGAGGAGCTGAGGCT 3269  
DB 1 GTGGGAGGAGCTGAGGCT 20

RESULT 334  
US-10-712-795-662

; Sequence 662, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 662  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-662

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3252 GCGAGGAGGAGCTGAGGCTAC 3271  
DB 1 GCGAGGAGGAGCTGAGGCTAC 20

RESULT 335  
US-10-712-795-663

; Sequence 663, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 663  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-663

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3254 GAAGCAGACTGAGGCTACCA 3273  
DB 1 GAAGCAGACTGAGGCTACCA 20

RESULT 336  
US-10-712-795-664  
; Sequence 664, Application US/10712795

; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 664  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-664

QY 3256 AGCAGACTGAGGCTACCATG 3275  
DB 1 AGCAGACTGAGGCTACCATG 20

RESULT 337  
US-10-712-795-665

; Sequence 665, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 665  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-712-795-665

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3258 CAGACTGAGGCTACCATGAC 3277  
DB 1 CAGACTGAGGCTACCATGAC 20

RESULT 338  
US-10-712-795-666

; Sequence 666, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662  
; CURRENT APPLICATION NUMBER: US/10/712,795  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-05-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 666

LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-666

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3260 GACTGAGGCTACCATGACAT 3279  
DB 1 GACTGAGGCTACCATGACAT 20

RESULT 339  
US-10-712-795-667  
Sequence 667, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:

APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 667  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-667

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3262 CTGAGGCTACCATGACATTC 3281  
DB 1 CTGAGGCTACCATGACATTC 20

RESULT 340  
US-10-712-795-668  
Sequence 668, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 668  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-668

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3264 GAGGCTACCATGACATTC 3283  
DB 1 GAGGCTACCATGACATTC 20

RESULT 341  
US-10-712-795-669  
Sequence 669, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:

APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 669  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-669

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3266 GGCTACCATGACATTC 3285  
DB 1 GGCTACCATGACATTC 20

RESULT 342  
US-10-712-795-670  
Sequence 670, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 670  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-670

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3268 CTACCATGACATTC 3287  
DB 1 CTACCATGACATTC 20

RESULT 343  
US-10-712-795-696  
Sequence 696, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 696  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-712-795-696

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3254 GAAGCAGCTGAGGCTACCA 3273  
DB 1 GAAGCAGCTGAGGCTACCA 20

RESULT 344  
US-10-712-795-879/c  
Sequence 879, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:

APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 879  
LENGTH: 20  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-879

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 426 AAAGAGTGTATGCTTCAA 445  
DB 20 AAAGAGTGTATGCTTCAA 1

RESULT 345  
US-10-712-795-880/c  
Sequence 880, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 880  
LENGTH: 20  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-880

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3001 AGAACAGCAGCTCTGTCA 3020  
DB 20 AGAACAGCAGCTCTGTCA 1

RESULT 346  
US-10-920-612-17/c  
Sequence 17, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:

APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 17  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-17

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATTCCACCGGAGCTGCGG 20  
DB 20 ATTCCACCGGAGCTGCGG 1

RESULT 347  
US-10-920-612-18/c  
Sequence 18, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 18  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-18

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 21 GGCTGAGTGCCTTCGTGT 40



Db 20 GGCTGAGTGCCTTCGCT 1

## RESULT 348

US-10-920-612-19/c  
; Sequence 19, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 19  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-19

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 71 CAGGCCCCGAGCCGAGGC 90  
Db 20 CAGGCGCGGAGCCGAGGC 1

## RESULT 349

US-10-920-612-20/c  
; Sequence 20, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 20  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-20

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 114 CCACCGCAGCTGGCGATGA 133  
Db 20 CCACCGCAGCTGGCGATGA 1

## RESULT 350

US-10-920-612-21/c  
; Sequence 21, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 21  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-21

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGGCGCTG 170  
Db 20 TGCTGGCGCTGCTGGCGCTG 1

RESULT 351  
US-10-920-612-22/c  
; Sequence 22, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 22  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-22

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGGCGGC 200  
Db 20 TGCTGCTGCTGCTGGCGGC 1

RESULT 352  
US-10-920-612-23/c  
; Sequence 23, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.

```

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 23
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-23
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      321 CCGGAGCTGCTGATTCAAG 340
Db      20 CCGGAGCTGCTGATTCAAG 1
```

```

RESULT 353
US-10-920-612-24/c
; Sequence 24, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 24
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-24
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      451 AGGCAAGCCTTGCTGAAG 470
Db      20 AGGCAAGCCTTGCTGAAG 1
```

```

RESULT 354
US-10-920-612-25/c
; Sequence 25, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
```

```

; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-25
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      716 GGGCAATGTGGCAACAGAAA 735
Db      20 GGGCAATGTGGCAACAGAAA 1
```

```

RESULT 355
US-10-920-612-26/c
; Sequence 26, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 26
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-26
```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      911 CAAGAGCAACACCTCTCC 930
Db      20 CAAGAGCAACACCTCTCC 1
```

```

RESULT 356
US-10-920-612-27/c
; Sequence 27, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
```

```
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 27
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-27
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 951 AAGTATGGGATGCTAGCACA 970
Db 20 AAGTATGGGATGCTAGCACA 1
```

```
RESULT 357
US-10-920-612-28/c
; Sequence 28, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-28
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1041 AAGATGGGCTCGCATTTGA 1060
Db 20 AAGATGGGCTCGCATTTGA 1
```

```
RESULT 358
US-10-920-612-29/c
; Sequence 29, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-29
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1231 CACAGCTGATTGAGTGTC 1250
Db 20 CACAGCTGATTGAGTGTC 1
```

```
RESULT 359
US-10-920-612-30/c
; Sequence 30, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-30
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1361 CACCTACTGCTGTGGCCCTGA 1380
Db 20 CACCTACTGCTGTGGCCCTGA 1
```

```
RESULT 360
US-10-920-612-31/c
; Sequence 31, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-31
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1561 GCACTGGGGATGAAGATTAC 1580  
DB 20 GCACTGGGGATGAAGATTAC 1

RESULT 361  
US-10-920-612-32/c  
; Sequence 32, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 32  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-32

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1611 ATGGGCCAACCATTGGAGCA 1630  
DB 20 ATGGGCCAACCATTGGAGCA 1

RESULT 362  
US-10-920-612-33/c  
; Sequence 33, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 33  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-33

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1791 GGAGATAAGCAGCTGCTGC 1810  
US-10-920-612-33

DB 20 GGAGATAAGCAGCTGCTGC 1

RESULT 363  
US-10-920-612-34/c  
; Sequence 34, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 34  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-34

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2331 GTGACCACCTTGGCTATAC 2350  
DB 20 GTGACCACCTTGGCTATAC 1

RESULT 364  
US-10-920-612-35/c  
; Sequence 35, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 35  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-35

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2496 CATGACCTCCAGCTCTGGG 2515  
DB 20 CATGACCTCCAGCTCTGGG 1

RESULT 365  
US-10-920-612-36/c

```
/ Sequence 36, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 36
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-36
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      2573 GGTGATCAGAGGAGGCTCAA 2592
Db      20  GGTGATCAGAGGAGGCTCAA 1
```

```
RESULT 366
US-10-920-612-37/c
/ Sequence 37, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 37
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-37
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      2811 GCTAGAGTGGGGTCCAGAT 2830
Db      20  GCTAGAGTGGGGTCCAGAT 1
```

```
RESULT 367
US-10-920-612-38/c
/ Sequence 38, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
```

```
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 38
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-38
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      2842 TCTTCCACGAGTGGGCTTG 2861
Db      20  TCTTCCACGAGTGGGCTTG 1
```

```
RESULT 368
US-10-920-612-39/c
/ Sequence 39, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 39
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-39
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY      3367 ATGATGATCTACTGAGGCG 3386
Db      20  ATGATGATCTACTGAGGCG 1
```

```
RESULT 369
US-10-920-612-40/c
/ Sequence 40, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
```

```
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-40
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3611 TTCCAGAGGCGTGCATGCGC 3630
Db      20  TTCCAGAGGCGTGCATGCGC 1
```

```
RESULT 370
US-10-920-612-41/c
; Sequence 41, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-41
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3791 GACTTCCGCGACGTGGGTT 3810
Db      20  GACTTCCGCGACGTGGGTT 1
```

```
RESULT 371
US-10-920-612-42/c
; Sequence 42, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
```

```
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-42
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3841 TTCAGAGGCGATCTGGGAGT 3860
Db      20  TTCAGAGGCGATCTGGGAGT 1
```

```
RESULT 372
US-10-920-612-43/c
; Sequence 43, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-43
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4281 CTTGGGCGCTGTTACCAAT 4300
Db      20  CTTGGGCGCTGTTACCAAT 1
```

```
RESULT 373
US-10-920-612-44/c
; Sequence 44, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-44

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4391 ATGTGATGGGTCTACGCC 4410  
DB 20 ATGTGATGGGTCTACGCC 1

RESULT 374  
US-10-920-612-45/c

Sequence 45, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

PRIOR FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 45

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-45

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4641 TGTGAGGAGTCTTAACAC 4660  
DB 20 TGTGAGGAGTCTTAACAC 1

RESULT 375  
US-10-920-612-124/c

Sequence 124, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

PRIOR FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 124

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-124

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 199 GCGCCAGGCCGAAGAGAA 218  
DB 20 GCGCCAGGCCGAAGAGAA 1

RESULT 376  
US-10-920-612-125/c

Sequence 125, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

PRIOR FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 125

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-125

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 299 GGCTGAGAGTCCAGTGAG 318  
DB 20 GGCTGAGAGTCCAGTGAG 1

RESULT 377  
US-10-920-612-126/c

Sequence 126, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

PRIOR FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 126

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-126

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 359 CTGCAAGTTGAGCTGAGG 378  
DB 20 CTGCAAGTTGAGCTGAGG 1

```
RESULT 378
US-10-920-612-127/c
; Sequence 127, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 127
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-127
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      429 GAGGTGATGCTTCAACCC 448
DB      20 GAGGTGATGCTTCAACCC 1
```

```
RESULT 379
US-10-920-612-128/c
; Sequence 128, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 128
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-128
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      509 CAGGTATGAGCTCAAGCTGG 528
DB      20 CAGGTATGAGCTCAAGCTGG 1
```

```
RESULT 380
US-10-920-612-129/c
; Sequence 129, Application US/10920612
```

```
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 129
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-129
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      584 CATCTGATCATCAAGAGG 603
DB      20 CATCTGATCATCAAGAGG 1
```

```
RESULT 381
US-10-920-612-130/c
; Sequence 130, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 130
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-130
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      669 ACCGTGATGAAGTCTC 688
DB      20 ACCGTGATGAAGTCTC 1
```

```
RESULT 382
US-10-920-612-131/c
; Sequence 131, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
```



```
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 131
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-131
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY          699 ACCGTCAGACGAGGAGG 718
DB          20 ACCGTCAGACGAGGAGG 1
```

```
RESULT 383
US-10-920-612-132/c
/ Sequence 132, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 132
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-132
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY          756 GGGCAGTGTGATCGCTTCAA 775
DB          20 GGGCAGTGTATCGCTTCAA 1
```

```
RESULT 384
US-10-920-612-133/c
/ Sequence 133, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 133
```

```
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 133
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-133
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY          799 CACTTGCTCTCATCAAGGC 818
DB          20 CACTTGCTCTCATCAAGGC 1
```

```
RESULT 385
US-10-920-612-134/c
/ Sequence 134, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 134
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-134
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY          869 CACACTGACGCTAAGAGA 888
DB          20 CACACTGACGCTAAGAGA 1
```

```
RESULT 386
US-10-920-612-135/c
/ Sequence 135, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 135
```

```
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-135
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1179 CTGTTACTGAGCTGAGAG 1198

Db 20 CTGTTACTGAGCTGAGAG 1

```
RESULT 387
US-10-920-612-136/c
; Sequence 136, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 136
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-136
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1279 AGTGTGACAGCTCAGTGC 1298

Db 20 AGTGTGACAGCTCAGTGC 1

```
RESULT 388
US-10-920-612-137/c
; Sequence 137, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 137
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
```

US-10-920-612-137

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1419 AACATGCGGAGGATCAGCG 1438

Db 20 AACATGCGGAGGATCAGCG 1

```
RESULT 389
US-10-920-612-138/c
; Sequence 138, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 138
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-138
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1459 CGCTGAGCCAGCGGTCAAC 1478

Db 20 CGCTGAGCCAGCGGTCAAC 1

```
RESULT 390
US-10-920-612-139/c
; Sequence 139, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 139
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-139
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1499 TACAGGACCCAGAGCTGC 1518  
|||  
DB 20 TACAGGACCCAGAGCTGC 1

RESULT 391  
US-10-920-612-140/c  
; Sequence 140, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 140  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-140

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1859 TGTCCAATTCTACCATGGG 1878  
|||  
DB 20 TGTCCAATTCTACCATGGG 1

RESULT 392  
US-10-920-612-141/c  
; Sequence 141, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 141  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-141

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2179 CAGCTGACCTCATGAGATT 2198  
|||  
DB 20 CAGCTGACCTCATGAGATT 1

RESULT 393  
US-10-920-612-142/c  
; Sequence 142, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 142  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-142

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2299 GTCAAGTTCTGATGTC 2318  
|||  
DB 20 GTCAAGTTCTGATGTC 1

RESULT 394  
US-10-920-612-143/c  
; Sequence 143, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 143  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-143

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2459 CCGCATCTTGAGAGAGAC 2478  
|||  
DB 20 CCGCATCTTGAGAGAGAC 1

RESULT 395  
US-10-920-612-144/c  
; Sequence 144, Application US/10920612  
; Publication No. US20050009088A1

```
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 144
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-144

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      2518 AGCTGCTTCGATGGTGCC 2537
Db      20 AGCTGCTTCGATGGTGCC 1

RESULT 396
US-10-920-612-145/C
; Sequence 145, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 145
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-145

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      2789 GGGCATCATCTCCGACT 2808
Db      20 GGGCATCATCTCCGACT 1

RESULT 397
US-10-920-612-146/C
; Sequence 146, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
```

```
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 146
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-146

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      2919 AGACCACTCAAGCTGCTCAG 2938
Db      20 AGACCACTCAAGCTGCTCAG 1

RESULT 398
US-10-920-612-147/C
; Sequence 147, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 147
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-147

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      3100 CCTACTATCCGCTGACCGGG 3119
Db      20 CCTACTATCCGCTGACCGGG 1

RESULT 399
US-10-920-612-148/C
; Sequence 148, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
```

```

; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 148
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-148
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      3449 GGGCCACCTAAGTTGTGACA 3468
Db      20 GGGCCACCTAAGTTGTGACA 1
```

```
RESULT 400
US-10-920-612-149/c
; Sequence 149, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 149
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-149
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      3919 AGAAGATGGATGGCAGAC 3938
Db      20 AGAAGATGGATGGCAGAC 1
```

```
RESULT 401
US-10-920-612-150/c
; Sequence 150, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 150
; LENGTH: 20
```

```

; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-150
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      4089 CTCACCTCAAGTCTGTGGG 4108
Db      20 CTCACCTCAAGTCTGTGGG 1
```

```
RESULT 402
US-10-920-612-151/c
; Sequence 151, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 151
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-151
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      4579 TCAAGATTGATGGCAGTTC 4598
Db      20 TCAAGATTGATGGCAGTTC 1
```

```
RESULT 403
US-10-920-612-185/c
; Sequence 185, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 185
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-185
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 229 ATGTGACCTGTGTCTGCA 248  
 |||||  
 Db 20 ATGTGACCTGTGTCTGCA 1

RESULT 404  
 US-10-920-612-186/c

; Sequence 186, Application US/10920612  
 ; Publication No. US2005009088A1  
 ; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39634A

; CURRENT APPLICATION NUMBER: US/10/920,612

; PRIOR FILING DATE: 2004-08-17

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; PRIOR FILING DATE: 2003-11-15

; PRIOR APPLICATION NUMBER: US 10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 186

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-186  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 269 GCACCTCCGGAAGTACACAT 288  
 |||||  
 Db 20 GCACCTCCGGAAGTACACAT 1

RESULT 405  
 US-10-920-612-187/c

; Sequence 187, Application US/10920612  
 ; Publication No. US2005009088A1  
 ; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39634A

; CURRENT APPLICATION NUMBER: US/10/920,612

; PRIOR FILING DATE: 2004-08-17

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; PRIOR FILING DATE: 2003-11-15

; PRIOR APPLICATION NUMBER: US 10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 187

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-187  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 389 CTGACGCTTCATCCTGAGA 408  
 |||||  
 Db 20 CTGACGCTTCATCCTGAGA 1

RESULT 406  
 US-10-920-612-188/c

; Sequence 188, Application US/10920612  
 ; Publication No. US2005009088A1  
 ; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39634A

; CURRENT APPLICATION NUMBER: US/10/920,612

; PRIOR FILING DATE: 2004-08-17

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; PRIOR FILING DATE: 2003-11-15

; PRIOR APPLICATION NUMBER: US 10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 188

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-188  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 449 TGAGGGCAAGCCTTGCTGA 468  
 |||||  
 Db 20 TGAGGGCAAGCCTTGCTGA 1

RESULT 407  
 US-10-920-612-189/c

; Sequence 189, Application US/10920612  
 ; Publication No. US2005009088A1  
 ; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION

; FILE REFERENCE: 30566/39634A

; CURRENT APPLICATION NUMBER: US/10/920,612

; PRIOR FILING DATE: 2004-08-17

; PRIOR APPLICATION NUMBER: PCT/US03/15493

; PRIOR FILING DATE: 2003-11-15

; PRIOR APPLICATION NUMBER: US 10/712,795

; PRIOR FILING DATE: 2003-11-13

; PRIOR APPLICATION NUMBER: US 60/426,234

; PRIOR FILING DATE: 2002-11-13

; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 189

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-189  
 Query Match 0.1%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 529 CCATTCCAGGAAGGAGCAG 548  
 |||||  
 Db 20 CCATTCCAGGAAGGAGCAG 1

```
RESULT 408
US-10-920-612-190/c
; Sequence 190, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 190
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-190
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      709 CGAGGAGGCGCATGTGGCA 728
Db      20 CGAGGAGGCGCATGTGGCA 1
```

```
RESULT 409
US-10-920-612-191/c
; Sequence 191, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 191
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-191
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      829 CCTTGTCACCTCTGATCAGC 848
Db      20 CCTTGTCACCTCTGATCAGC 1
```

```
RESULT 410
US-10-920-612-192/c
; Sequence 192, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 192
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-192
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      849 AGCAGCCAGTCCTGTGAGTA 868
Db      20 AGCAGCCAGTCCTGTGAGTA 1
```

```
RESULT 411
US-10-920-612-193/c
; Sequence 193, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 193
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-193
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      889 AGCATGTGGCAGAGCCATC 908
Db      20 AGCATGTGGCAGAGCCATC 1
```

```
RESULT 412
US-10-920-612-194/c
; Sequence 194, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
```

```

; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 194
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-194

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1059 GAGAGCACCAATCCACATC 1078
Db      20 GAGAGCACCAATCCACATC 1

```

```

RESULT 413
US-10-920-612-195/c
; Sequence 195, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 195
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-195

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1199 CCTCAGTGTGATGACAGCTCA 1218
Db      20 CCTCAGTGTGATGACAGCTCA 1

```

```

RESULT 414
US-10-920-612-196/c
; Sequence 196, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234

```

```

; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 196
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-196

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1349 GATAGATGTGTGACCTACC 1368
Db      20 GATAGATGTGTGACCTACC 1

```

```

RESULT 415
US-10-920-612-197/c
; Sequence 197, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 197
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-197

```

```

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1390 CCTCAGCAGCAGCTGCCA 1409
Db      20 CCTCAGCAGCAGCTGCCA 1

```

```

RESULT 416
US-10-920-612-198/c
; Sequence 198, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 198
; LENGTH: 20
; TYPE: DNA

```



```
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-198
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1589 GATTCTGGCGGTCATTGGA 1608
DB      20 GATTCTGGCGGTCATTGGA 1
```

```
RESULT 417
US-10-920-612-199/c
; Sequence 199, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 199
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-199
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1678 CAAGCCATCACTGATGATC 1697
DB      20 CAAGCCATCACTGATGATC 1
```

```
RESULT 418
US-10-920-612-200/c
; Sequence 200, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 200
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-200
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1699 AGAAGCTGCCATCCAGGCT 1718
DB      20 AGAAGCTGCCATCCAGGCT 1
```

```
RESULT 419
US-10-920-612-201/c
; Sequence 201, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 201
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-201
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1749 CAGAGGTTCTTCTTCAGAC 1768
DB      20 CAGAGGTTCTTCTTCAGAC 1
```

```
RESULT 420
US-10-920-612-202/c
; Sequence 202, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 202
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-202
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      1829 GAGTCTTCACAGGCAGATA 1848
```

Db 20 GAGCTCTTACAGCAGATATA 1

## RESULT 421

US-10-920-612-203/c  
; Sequence 203, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 203  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-203

## Query Match

Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCCAAATATCTTGAAGTCAG 1938

Db 20 TGCCAAATATCTTGAAGTCAG 1

## RESULT 422

US-10-920-612-204/c  
; Sequence 204, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 204  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-204

## Query Match

Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2189 CATGAGATTGGCTTGAAG 2208

Db 20 CATGAGATTGGCTTGAAG 1

## RESULT 423

US-10-920-612-205/c  
; Sequence 205, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 205  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-205

## Query Match

Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2649 GGAGCTGGATTACAGTTGCA 2668

Db 20 GGAGCTGGATTACAGTTGCA 1

## RESULT 424

US-10-920-612-206/c  
; Sequence 206, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 206  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-206

## Query Match

Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2729 CAACATGACAGCTGAACTGG 2748

Db 20 CAACATGACAGCTGAACTGG 1

## RESULT 425

US-10-920-612-207/c  
; Sequence 207, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.

```
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 207
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-207
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 2949 ACATTACATTGGTCTCTAC 2968

Db 20 ACATTACATTGGTCTCTAC 1

```
RESULT 426
US-10-920-612-208/c
/ Sequence 208, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 208
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-208
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 3059 CTCAGGCGCTTACTCCACG 3078

Db 20 CTCAGGCGCTTACTCCACG 1

```
RESULT 427
US-10-920-612-209/c
/ Sequence 209, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
```

```
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 209
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-209
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 3118 GGGACACGAGATTAGAGCTG 3137

Db 20 GGGACACGAGATTAGAGCTG 1

```
RESULT 428
US-10-920-612-210/c
/ Sequence 210, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 210
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-210
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 3189 GAGCTCCAGAGAGAGCAG 3208

Db 20 GAGCTCCAGAGAGAGCAG 1

```
RESULT 429
US-10-920-612-211/c
/ Sequence 211, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
```

```
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 211
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-211
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3289 ATCGCAGAGTATGACCTTG 3308
Db      20 ATCGCAGAGTATGACCTTG 1
```

RESULT 430

```
US-10-920-612-212/c
; Sequence 212, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426, 234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 212
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-212
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3488 CAAGGTGTATTTCATAC 3507
Db      20 CAAGGTGTATTTCATAC 1
```

RESULT 431

```
US-10-920-612-213/c
; Sequence 213, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426, 234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 213
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-213
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3579 GACTCATCTGCTACAGCTTA 3598
Db      20 GACTCATCTGCTACAGCTTA 1
```

RESULT 432

```
US-10-920-612-214/c
; Sequence 214, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426, 234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 214
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-214
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      4039 GCAATCTCTCAGAGATCTA 4058
Db      20 GCAATCTCTCAGAGATCTA 1
```

RESULT 433

```
US-10-920-612-215/c
; Sequence 215, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920, 612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712, 795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426, 234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 215
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-215
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
```

Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4180 CTCTCTGGGTCTTCTAGAC 4199  
|||||  
Db 20 CTCTCTGGGTCTTCTAGAC 1

RESULT 434  
US-10-920-612-216/c  
; Sequence 216, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 216  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-216

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4299 ATGAAGCTGACTCTGCT 4318  
|||||  
Db 20 ATGAAGCTGACTCTGCT 1

RESULT 435  
US-10-920-612-217/c  
; Sequence 217, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 217  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-217

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4511 GGAGCCACAGATGCTGCTT 4530  
|||||

Db 20 GGAGCCACAGATGCTGCTT 1

RESULT 436  
US-10-920-612-218/c  
; Sequence 218, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 218  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-218

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4660 CTGCGCGCTCATGAGAG 4679  
|||||  
Db 20 CTGCGCGCTCATGAGAG 1

RESULT 437  
US-10-920-612-219/c  
; Sequence 219, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 219  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-219

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4919 GCTGCTTCTGAATATCAG 4938  
|||||  
Db 20 GCTGCTTCTGAATATCAG 1

RESULT 438  
US-10-920-612-247/c

```
/ Sequence 247, Application US/10920612
/ Publication No. US20050009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 247
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-247

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3249 GGTGCGAGCAGACTGAGGC 3268
DB      20 GGTGCGAGCAGACTGAGGC 1

RESULT 439
US-10-920-612-248/c
/ Sequence 248, Application US/10920612
/ Publication No. US20050009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 248
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-248

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3 TCCGACCGGAGCTGCGGGG 22
DB      20 TCCGACCGGAGCTGCGGGG 1

RESULT 440
US-10-920-612-249/c
/ Sequence 249, Application US/10920612
/ Publication No. US20050009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
```

```
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 249
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-249

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      6 CACCGGAGCTGCGGGCTG 25
DB      20 CACCGGAGCTGCGGGCTG 1

RESULT 441
US-10-920-612-250/c
/ Sequence 250, Application US/10920612
/ Publication No. US20050009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 250
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-250

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      23 CTGAGTGCCCTTCTCGGTTG 42
DB      20 CTGAGTGCCCTTCTCGGTTG 1

RESULT 442
US-10-920-612-251/c
/ Sequence 251, Application US/10920612
/ Publication No. US20050009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
```

```
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 251
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-251
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy 35 CTCGGTGTGCGCGCTGAGG 54
Db 20 CTCGGTGTGCGCGCTGAGG 1
```

```
RESULT 443
US-10-920-612-252/c
; Sequence 252, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 252
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-252
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy 36 TCGGTGTGCTGCGCGCTGAGA 55
Db 20 TCGGTGTGCTGCGCGCTGAGA 1
```

```
RESULT 444
US-10-920-612-253/c
; Sequence 253, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
```

```
; SEQ ID NO 253
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-253
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy 37 CGGTGCTGCGCGCTGAGAG 56
Db 20 CGGTGCTGCGCGCTGAGAG 1
```

```
RESULT 445
US-10-920-612-254/c
; Sequence 254, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 254
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-254
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy 39 GTTGCTGCGCGCTGAGAGCC 58
Db 20 GTTGCTGCGCGCTGAGAGCC 1
```

```
RESULT 446
US-10-920-612-255/c
; Sequence 255, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 255
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-255

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 43 CTGCGGCTGAGAGCCGCC 62  
DB 20 CTGCGGCTGAGAGCCGCC 1

RESULT 447  
US-10-920-612-256/c  
Sequence 256, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

CURRENT FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 256

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-256  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 116 ACCGACGTGGCGATGACC 135  
DB 20 ACCGACGTGGCGATGACC 1

RESULT 448  
US-10-920-612-257/c  
Sequence 257, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

CURRENT FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 257

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-257  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 120 CAGTGGCGATGAGCCGCC 139  
DB 20 CAGTGGCGATGAGCCGCC 1

RESULT 449  
US-10-920-612-285/c  
Sequence 285, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

CURRENT FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 285

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-285  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3230 GTTGTACTCAAGCAGAAG 3249  
DB 20 GTTGTACTCAAGCAGAAG 1

RESULT 450  
US-10-920-612-286/c  
Sequence 286, Application US/10920612  
Publication No. US2005009088A1

GENERAL INFORMATION:

APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A

CURRENT APPLICATION NUMBER: US/10/920,612

CURRENT FILING DATE: 2004-08-17

PRIOR APPLICATION NUMBER: PCT/US03/15493

PRIOR FILING DATE: 2003-11-15

PRIOR APPLICATION NUMBER: US 10/712,795

PRIOR FILING DATE: 2003-11-13

PRIOR APPLICATION NUMBER: US 60/426,234

PRIOR FILING DATE: 2002-11-13

NUMBER OF SEQ ID NOS: 892

SEQ ID NO 286

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide

US-10-920-612-286  
Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGTCAAGCAGAAGT 3251  
DB 20 TTGTAAGTCAAGCAGAAGT 1



```
RESULT 451
US-10-920-612-287/c
; Sequence 287, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 287
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-287
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      3234 GTAACGACGAGGAGGTGC 3253
Db      20  GTAACTCAGCAGGAGGTGC 1
```

```
RESULT 452
US-10-920-612-288/c
; Sequence 288, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 288
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-288
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      3236 AACTCAGCAGGAGGTGCGA 3255
Db      20  AACTCAGCAGGAGGTGCGA 1
```

```
RESULT 453
US-10-920-612-289/c
; Sequence 289, Application US/10920612
```

```
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 289
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-289
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      3238 CTCAGCAGGAGGTGCGAG 3257
Db      20  CTCAGCAGGAGGTGCGAG 1
```

```
RESULT 454
US-10-920-612-290/c
; Sequence 290, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 290
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-290
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Oy      3240 CAAGCAGGAGGTGCGAGCA 3259
Db      20  CAAGCAGGAGGTGCGAGCA 1
```

```
RESULT 455
US-10-920-612-291/c
; Sequence 291, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
```

```
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 291
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-291

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3242 AGCAGAGGTGCGAGCAGACA 3261
Db      20 AGCAGAGGTGCGAGCAGACA 1

RESULT 456
US-10-920-612-292/c
/ Sequence 292, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 292
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-292

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3244 CAGAGGTGCGAGCAGACT 3263
Db      20 CAGAGGTGCGAGCAGACT 1

RESULT 457
US-10-920-612-293/c
/ Sequence 293, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
```

```
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 293
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-293

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3246 GAGGTGCGAGCAGACTGA 3265
Db      20 GAGGTGCGAGCAGACTGA 1

RESULT 458
US-10-920-612-294/c
/ Sequence 294, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 294
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-294

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3248 AGGTGCGAGCAGACTGAGG 3267
Db      20 AGGTGCGAGCAGACTGAGG 1

RESULT 459
US-10-920-612-295/c
/ Sequence 295, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 295
```

```

; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-295
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3250 GTGGAGAGCAGACTGAGGCT 3269
      |||||
Db      20 GTGGAGAGCAGACTGAGGCT 1
```

```
RESULT 460
US-10-920-612-296/c
; Sequence 296, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 296
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-296
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3252 GCGAAGCAGACTGAGGCTAC 3271
      |||||
Db      20 GCGAAGCAGACTGAGGCTAC 1
```

```
RESULT 461
US-10-920-612-297/c
; Sequence 297, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 297
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
```

US-10-920-612-297

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3254 GAAGCAGACTGAGGCTACCA 3273
      |||||
Db      20 GAAGCAGACTGAGGCTACCA 1
```

```
RESULT 462
US-10-920-612-298/c
; Sequence 298, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 298
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-298
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3256 AGCAGACTGAGGCTACCATG 3275
      |||||
Db      20 AGCAGACTGAGGCTACCATG 1
```

```
RESULT 463
US-10-920-612-299/c
; Sequence 299, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 299
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-299
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 3258 CAGACTGAGGCTACCATGAC 3277  
| | | | | | | | | | | | | | | | | |  
Db 20 CAGACTGAGGCTACCATGAC 1

RESULT 464  
US-10-920-612-300/c  
; Sequence 300, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 300  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-300

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3260 GACTGAGGCTACCATGACAT 3279  
| | | | | | | | | | | | | | | | | |  
Db 20 GACTGAGGCTACCATGACAT 1

RESULT 465  
US-10-920-612-301/c  
; Sequence 301, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 301  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-301

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3262 CTGAGGCTACCATGACATTC 3281  
| | | | | | | | | | | | | | | | | |  
Db 20 CTGAGGCTACCATGACATTC 1

RESULT 466  
US-10-920-612-302/c  
; Sequence 302, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 302  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-302

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3264 GAGGCTACCATGACATTCAA 3283  
| | | | | | | | | | | | | | | | | |  
Db 20 GAGGCTACCATGACATTCAA 1

RESULT 467  
US-10-920-612-303/c  
; Sequence 303, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 303  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-303

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3266 GGCTACCATGACATTCAAAT 3285  
| | | | | | | | | | | | | | | | | |  
Db 20 GGCTACCATGACATTCAAAT 1

RESULT 468  
US-10-920-612-304/c  
; Sequence 304, Application US/10920612  
; Publication No. US2005009088A1

```
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US 10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 304
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-304
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3268 CTACCATGACATTCATAATAT 3287
Db      20  CTACCATGACATTCATAATAT 1
```

```
RESULT 469
US-10-920-612-514/C
; Sequence 514, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US 10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 514
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-514
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3254 GAAGCAGACTGAGGCTACCA 3273
Db      20  GAAGCAGACTGAGGCTACCA 1
```

```
RESULT 470
US-10-920-612-516
; Sequence 516, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US 10/920,612
```

```
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 516
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-516
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      199 GCGCCAGGCGCCGAAGGAA 218
Db      1  GCGCCAGGCGCCGAAGGAA 20
```

```
RESULT 471
US-10-920-612-517
; Sequence 517, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US 10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 517
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-517
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      509 CAGGTATGAGCTCAAGCTGG 528
Db      1  CAGGTATGAGCTCAAGCTGG 20
```

```
RESULT 472
US-10-920-612-518
; Sequence 518, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US 10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 518
```

LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-518

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 584 CATCTGAACATCAAGGCG 603  
DB 1 CATCTGAACATCAAGGCG 20

RESULT 473  
US-10-920-612-519  
Sequence 519, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 519  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-519

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 756 GGGCAGTGTGATCGCTTCAA 775  
DB 1 GGGCAGTGTGATCGCTTCAA 20

RESULT 474  
US-10-920-612-520  
Sequence 520, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 520  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-520

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 799 CACTGTCTCATCAAGGC 818  
DB 1 CACTGTCTCATCAAGGC 20

RESULT 475  
US-10-920-612-521  
Sequence 521, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 521  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-521

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 869 CACACTGAGCGCTAAGGCA 888  
DB 1 CACACTGAGCGCTAAGGCA 20

RESULT 476  
US-10-920-612-522  
Sequence 522, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 522  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-522

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1459 CGCTGAGCCACGGGCTCAAC 1478  
DB 1 CGCTGAGCCACGGGCTCAAC 20

RESULT 477  
US-10-920-612-523  
Sequence 523, Application US/10920612  
Publication No. US2005009088A1

```
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-523
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1859 TGTCGAATTCATCCATGGG 1878
Db      1 TGTCGAATTCATCCATGGG 20
```

```
RESULT 478
US-10-920-612-524
; Sequence 524, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 524
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-524
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      2179 CAGCTGACCTCATCGAGATT 2198
Db      1 CAGCTGACCTCATCGAGATT 20
```

```
RESULT 479
US-10-920-612-525
; Sequence 525, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
```

```
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 525
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-525
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      2299 GTCAGTTCTGATGTTGTC 2318
Db      1 GTCAGTTCTGATGTTGTC 20
```

```
RESULT 480
US-10-920-612-526
; Sequence 526, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 526
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-526
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      2518 AGCTGCTTCGATGGGTGCC 2537
Db      1 AGCTGCTTCGATGGGTGCC 20
```

```
RESULT 481
US-10-920-612-527
; Sequence 527, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 527
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-527
```

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2789 GGGCATCATTCGCGACT 2808  
DB 1 GGGCATCATTCGCGACT 20

RESULT 482  
US-10-920-612-528  
; Sequence 528, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 528  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-528

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3100 CTTACTATCCGTCGACGGG 3119  
DB 1 CTTACTATCCGTCGACGGG 20

RESULT 483  
US-10-920-612-529  
; Sequence 529, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 529  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-529

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3449 GGGCACCTTAAGTTGTGACA 3468  
DB 1 GGGCACCTTAAGTTGTGACA 20

RESULT 484  
US-10-920-612-530  
; Sequence 530, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 530  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-530

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3919 AGAATGGGATTCGACGAC 3938  
DB 1 AGAATGGGATTCGACGAC 20

RESULT 485  
US-10-920-612-531  
; Sequence 531, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 531  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-531

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4089 CTCACCTCAAGTCGTGGG 4108  
DB 1 CTCACCTCAAGTCGTGGG 20

RESULT 486  
US-10-920-612-553  
; Sequence 553, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A



```
;; CURRENT APPLICATION NUMBER: US/10/920,612
;; CURRENT FILING DATE: 2004-08-17
;; PRIOR APPLICATION NUMBER: PCT/US03/15493
;; PRIOR FILING DATE: 2003-11-15
;; PRIOR APPLICATION NUMBER: US 10/712,795
;; PRIOR FILING DATE: 2003-11-13
;; PRIOR APPLICATION NUMBER: US 60/426,234
;; PRIOR FILING DATE: 2002-11-13
;; NUMBER OF SEQ ID NOS: 892
;; SEQ ID NO 553
;; LENGTH: 20
;; TYPE: DNA
;; ORGANISM: H. sapiens
US-10-920-612-553
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      229 ATGTCAGCTGCTGTCTGCA 248
Db      1 ATGTCAGCTGCTGTCTGCA 20
```

```
RESULT 487
US-10-920-612-554
; Sequence 554, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 554
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-554
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      269 GCACCTCCGGAAGTACACAT 288
Db      1 GCACCTCCGGAAGTACACAT 20
```

```
RESULT 488
US-10-920-612-555
; Sequence 555, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
```

```
;; SEQ ID NO 555
;; LENGTH: 20
;; TYPE: DNA
;; ORGANISM: H. sapiens
US-10-920-612-555
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      389 CTGACGCTCATCCTGAGGA 408
Db      1 CTGACGCTCATCCTGAGGA 20
```

```
RESULT 489
US-10-920-612-556
; Sequence 556, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 556
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-556
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      449 TGAGGGCAAGCCTTGCTGA 468
Db      1 TGAGGGCAAGCCTTGCTGA 20
```

```
RESULT 490
US-10-920-612-557
; Sequence 557, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 557
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-557
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 529 CCATCCAGAGGAGCAG 548  
Db 1 CCATCCAGAGGAGCAG 20

RESULT 491  
US-10-920-612-558  
; Sequence 558, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 558  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-558

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 709 CGAGGAAGGCGCATGTGGCA 728  
Db 1 CGAGGAAGGCGCATGTGGCA 20

RESULT 492  
US-10-920-612-559  
; Sequence 559, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 559  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-559

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 829 CTTGTCACTGTGATCAGC 848  
Db 1 CTTGTCACTGTGATCAGC 20

RESULT 493  
US-10-920-612-560  
; Sequence 560, Application US/10920612

; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 560  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-560

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 849 AGCAGCCAGTCTGTGAGTA 868  
Db 1 AGCAGCCAGTCTGTGAGTA 20

RESULT 494  
US-10-920-612-561  
; Sequence 561, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 561  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-561

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 889 AGCATGTGCGAGAGCCATC 908  
Db 1 AGCATGTGCGAGAGCCATC 20

RESULT 495  
US-10-920-612-562  
; Sequence 562, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15

```

; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 562
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-562
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1059 GAGAGCACCACCAATCCACATC 1078
Db      1 GAGAGCACCACCAATCCACATC 20
```

```
RESULT 496
US-10-920-612-563
; Sequence 563, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 563
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-563
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1199 CCTCAGTGATGAGACGAGTCA 1218
Db      1 CCTCAGTGATGAGACGAGTCA 20
```

```
RESULT 497
US-10-920-612-564
; Sequence 564, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 564
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
```

US-10-920-612-564

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1349 GATGATGTGTGATCCTACC 1368
Db      1 GATGATGTGTGATCCTACC 20
```

```
RESULT 498
US-10-920-612-565
; Sequence 565, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 565
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-565
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1390 CCTCAGCAGCAGCGCTGCGA 1409
Db      1 CCTCAGCAGCAGCGCTGCGA 20
```

```
RESULT 499
US-10-920-612-566
; Sequence 566, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 566
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-566
```

```
Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      1589 GATTCTGCGGATCATTTGGA 1608
Db      1 GATTCTGCGGATCATTTGGA 20
```

```
RESULT 500
US-10-920-612-567
; Sequence 567, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 567
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-567

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1678 CAAGCCATCATCTGATGATC 1697
DB      1 CAAGCCATCATCTGATGATC 20
|||||

RESULT 501
US-10-920-612-568
; Sequence 568, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 568
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-568

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1699 AGAAGCTGCATCCAGGCT 1718
DB      1 AGAAGCTGCATCCAGGCT 20
|||||

RESULT 502
US-10-920-612-569
; Sequence 569, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
```

```
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 569
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-569

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1749 CAGGAGTCTCTTCAGAC 1768
DB      1 CAGGAGTCTCTTCAGAC 20
|||||

RESULT 503
US-10-920-612-570
; Sequence 570, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 570
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-570

Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1829 GAGTCTTTCACAGCAGATA 1848
DB      1 GAGTCTTTCACAGCAGATA 20
|||||

RESULT 504
US-10-920-612-571
; Sequence 571, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
```

NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 571  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-571

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1919 TGCACATATCTGAACTCAG 1938  
Db 1 TGCACATATCTGAACTCAG 20

RESULT 505  
US-10-920-612-572  
Sequence 572, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 572  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-572

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2189 CATCGAGATTGCTTGAG 2208  
Db 1 CATCGAGATTGCTTGAG 20

RESULT 506  
US-10-920-612-573  
Sequence 573, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 573  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-573

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2649 GGAGCTGATTACATTGCA 2668  
Db 1 GGAGCTGATTACATTGCA 20

RESULT 507  
US-10-920-612-574  
Sequence 574, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 574  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-574

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2729 CAACATGACAGCTGACTGG 2748  
Db 1 CAACATGACAGCTGACTGG 20

RESULT 508  
US-10-920-612-575  
Sequence 575, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 575  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-575

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2949 ACATTACATTGCTCTTAC 2968  
Db 1 ACATTACATTGCTCTTAC 20

RESULT 509  
US-10-920-612-576

```
; Sequence 576, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 576
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-576

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3059 CTCAGGCGCTTACTCCACG 3078
Db 1 CTCAGGCGCTTACTCCACG 20

RESULT 510
US-10-920-612-577
; Sequence 577, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 577
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-577

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3118 GGGACACCAAGTTAGACTG 3137
Db 1 GGGACACCAAGTTAGACTG 20

RESULT 511
US-10-920-612-578
; Sequence 578, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
```

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; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 578
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-578

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3189 GAGCTCCAGAGAGAGACAG 3208
Db 1 GAGCTCCAGAGAGAGACAG 20

RESULT 512
US-10-920-612-579
; Sequence 579, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 579
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-579

Query Match
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;
Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3289 ATCGGACAGTATGACCTTG 3308
Db 1 ATCGGACAGTATGACCTTG 20

RESULT 513
US-10-920-612-580
; Sequence 580, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 580
; LENGTH: 20
; TYPE: DNA
```

ORGANISM: H. sapiens  
US-10-920-612-580

Query Match  
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3488 CAAGGCTGTTATTTCATAC 3507  
DB 1 CAAGGCTGTTATTTCATAC 20

RESULT 514

US-10-920-612-581  
Sequence 581, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 581  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-581

Query Match  
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3579 GACTCATCTGCTACAGCTTA 3598  
DB 1 GACTCATCTGCTACAGCTTA 20

RESULT 515

US-10-920-612-582  
Sequence 582, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 582  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-582

Query Match  
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4039 GCAATCTCCAGAGATCTA 4058  
DB 1 GCAATCTCCAGAGATCTA 20

DB 1 GCAATCTCCAGAGATCTA 20

RESULT 516  
US-10-920-612-583  
Sequence 583, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 583  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-583

Query Match  
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4180 CTCTCCTGGGCTGTTCTAGAC 4199  
DB 1 CTCTCCTGGGCTGTTCTAGAC 20

RESULT 517  
US-10-920-612-584  
Sequence 584, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: US/10/920,612  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 584  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-584

Query Match  
Best Local Similarity 100.0%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4299 ATGAAGCTGACTCTGTGCT 4318  
DB 1 ATGAAGCTGACTCTGTGCT 20

RESULT 518  
US-10-920-612-585  
Sequence 585, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

```
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 585
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-585
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 4511 GGGACCAAGATCTCTCTT 4530
Db 1 GGGACCAAGATCTCTCTT 20
```

```
RESULT 519
US-10-920-612-586
; Sequence 586, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 586
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-586
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 4660 CTGGCCGCTCAATGAGAG 4679
Db 1 CTGGCCGCTCAATGAGAG 20
```

```
RESULT 520
US-10-920-612-587
; Sequence 587, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 587
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-587
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 4919 GCTGCGTTCTGAATATCAGG 4938
Db 1 GCTGCGTTCTGAATATCAGG 20
```

```
RESULT 521
US-10-920-612-614
; Sequence 614, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 614
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-614
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3249 GGTGCGAAGCACTGAGGC 3268
Db 1 GGTGCGAAGCACTGAGGC 20
```

```
RESULT 522
US-10-920-612-615
; Sequence 615, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 615
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-615
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
```



Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3 TCCACCGGAGCTGCGGG 22  
Db 1 TCCACCGGAGCTGCGGG 20

RESULT 523  
US-10-920-612-616  
; Sequence 616, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 616  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-616

Query Match  
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 6 CACCGGAGCTGCGGGCTG 25  
Db 1 CACCGGAGCTGCGGGCTG 20

RESULT 524  
US-10-920-612-617  
; Sequence 617, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 617  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-617

Query Match  
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 23 CTGAGTCCCTTCTCGGTTG 42  
Db 1 CTGAGTCCCTTCTCGGTTG 20

RESULT 525

US-10-920-612-618  
; Sequence 618, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 618  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-618

Query Match  
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 35 CTGGTTGCTGCCGCTGAGG 54  
Db 1 CTGGTTGCTGCCGCTGAGG 20

RESULT 526  
US-10-920-612-619  
; Sequence 619, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 619  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-619

Query Match  
Best Local Similarity 0.1%; Score 20; DB 1; Length 20;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 36 TCGGTTGCTGCCGCTGAGA 55  
Db 1 TCGGTTGCTGCCGCTGAGA 20

RESULT 527  
US-10-920-612-620  
; Sequence 620, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT APPLICATION NUMBER: US/10/920,612  
; PRIOR FILING DATE: 2004-08-17

```
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 620
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-620

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      37 CGGTTGCTGCCGCTGAGAG 56
Db      1 CGGTTGCTGCCGCTGAGAG 20

RESULT 528
US-10-920-612-621
; Sequence 621, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 621
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-621

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      39 GTTGCTGCCGCTGAGAGCC 58
Db      1 GTTGCTGCCGCTGAGAGCC 20

RESULT 529
US-10-920-612-622
; Sequence 622, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 622
; LENGTH: 20
```

```
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-622

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      43 CTGCCGCTGAGAGCCGCC 62
Db      1 CTGCCGCTGAGAGCCGCC 20

RESULT 530
US-10-920-612-623
; Sequence 623, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 623
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-623

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      116 ACCGAGCTGGCGATGACC 135
Db      1 ACCGAGCTGGCGATGACC 20

RESULT 531
US-10-920-612-624
; Sequence 624, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 624
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-624

Query Match          0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      120 CAGCTGGCGATGAGCCGCC 139
```

Db 1 CAGTGGCGATGACCCGCC 20

## RESULT 532

US-10-920-612-651  
; Sequence 651, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 651  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-651

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3230 GTTGTACTCAGCAGAAG 3249

Db 1 GTTGTACTCAGCAGAAG 20

## RESULT 533

US-10-920-612-652  
; Sequence 652, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 652  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-652

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3232 TTGTACTCAGCAGAAGT 3251

Db 1 TTGTACTCAGCAGAAGT 20

## RESULT 534

US-10-920-612-653  
; Sequence 653, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:

; APPLICANT: Crooke et al.

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 653  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-653

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3234 GTAACCTCAGCAGAGGTGC 3253

Db 1 GTAACCTCAGCAGAGGTGC 20

## RESULT 535

US-10-920-612-654  
; Sequence 654, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/426,234  
; PRIOR FILING DATE: 2002-11-13  
; NUMBER OF SEQ ID NOS: 892  
; SEQ ID NO 654  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
US-10-920-612-654

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3236 AACTCAGCAGAGGTGCGA 3255

Db 1 AACTCAGCAGAGGTGCGA 20

## RESULT 536

US-10-920-612-655  
; Sequence 655, Application US/10920612  
; Publication No. US2005009088A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39634A  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: PCT/US03/15493  
; PRIOR FILING DATE: 2003-11-15  
; PRIOR APPLICATION NUMBER: US 10/712,795  
; PRIOR FILING DATE: 2003-11-13

;; PRIOR APPLICATION NUMBER: US 60/426,234  
;; PRIOR FILING DATE: 2002-11-13  
;; NUMBER OF SEQ ID NOS: 892  
;; SEQ ID NO 655  
;; LENGTH: 20  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
US-10-920-612-655

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3238 CTCACGACGAAGTGCAG 3257  
Db 1 CTCACGACGAAGTGCAG 20

RESULT 537  
US-10-920-612-656  
;; Sequence 656, Application US/10920612  
;; Publication No. US2005009088A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Crooke et al.  
;; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
;; FILE REFERENCE: 30566/39634A  
;; CURRENT APPLICATION NUMBER: US/10/920,612  
;; CURRENT FILING DATE: 2004-08-17  
;; PRIOR APPLICATION NUMBER: PCT/US03/15493  
;; PRIOR FILING DATE: 2003-11-15  
;; PRIOR APPLICATION NUMBER: US 10/712,795  
;; PRIOR FILING DATE: 2003-11-13  
;; PRIOR APPLICATION NUMBER: US 60/426,234  
;; PRIOR FILING DATE: 2002-11-13  
;; NUMBER OF SEQ ID NOS: 892  
;; SEQ ID NO 656  
;; LENGTH: 20  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
US-10-920-612-656

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3240 CAACGACGAAGTGCAGCA 3259  
Db 1 CAACGACGAAGTGCAGCA 20

RESULT 538  
US-10-920-612-657  
;; Sequence 657, Application US/10920612  
;; Publication No. US2005009088A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Crooke et al.  
;; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
;; FILE REFERENCE: 30566/39634A  
;; CURRENT APPLICATION NUMBER: US/10/920,612  
;; CURRENT FILING DATE: 2004-08-17  
;; PRIOR APPLICATION NUMBER: PCT/US03/15493  
;; PRIOR FILING DATE: 2003-11-15  
;; PRIOR APPLICATION NUMBER: US 10/712,795  
;; PRIOR FILING DATE: 2003-11-13  
;; PRIOR APPLICATION NUMBER: US 60/426,234  
;; PRIOR FILING DATE: 2002-11-13  
;; NUMBER OF SEQ ID NOS: 892  
;; SEQ ID NO 657  
;; LENGTH: 20  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
US-10-920-612-657

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3242 AGCAGAGGTGCCAGACGA 3261  
Db 1 AGCAGAGGTGCCAGACGA 20

RESULT 539  
US-10-920-612-658  
;; Sequence 658, Application US/10920612  
;; Publication No. US2005009088A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Crooke et al.  
;; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
;; FILE REFERENCE: 30566/39634A  
;; CURRENT APPLICATION NUMBER: US/10/920,612  
;; CURRENT FILING DATE: 2004-08-17  
;; PRIOR APPLICATION NUMBER: PCT/US03/15493  
;; PRIOR FILING DATE: 2003-11-15  
;; PRIOR APPLICATION NUMBER: US 10/712,795  
;; PRIOR FILING DATE: 2003-11-13  
;; PRIOR APPLICATION NUMBER: US 60/426,234  
;; PRIOR FILING DATE: 2002-11-13  
;; NUMBER OF SEQ ID NOS: 892  
;; SEQ ID NO 658  
;; LENGTH: 20  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
US-10-920-612-658

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3244 CAGAGGTGCCAGACACT 3263  
Db 1 CAGAGGTGCCAGACACT 20

RESULT 540  
US-10-920-612-659  
;; Sequence 659, Application US/10920612  
;; Publication No. US2005009088A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Crooke et al.  
;; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
;; FILE REFERENCE: 30566/39634A  
;; CURRENT APPLICATION NUMBER: US/10/920,612  
;; CURRENT FILING DATE: 2004-08-17  
;; PRIOR APPLICATION NUMBER: PCT/US03/15493  
;; PRIOR FILING DATE: 2003-11-15  
;; PRIOR APPLICATION NUMBER: US 10/712,795  
;; PRIOR FILING DATE: 2003-11-13  
;; PRIOR APPLICATION NUMBER: US 60/426,234  
;; PRIOR FILING DATE: 2002-11-13  
;; NUMBER OF SEQ ID NOS: 892  
;; SEQ ID NO 659  
;; LENGTH: 20  
;; TYPE: DNA  
;; ORGANISM: H. sapiens  
US-10-920-612-659

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3246 GAAGTGCAGACGACTGA 3265  
Db 1 GAAGTGCAGACGACTGA 20

```
RESULT 541
US-10-920-612-660
; Sequence 660, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 660
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-660
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3248 AGGTGCGAAGCAGACTGAGG 3267
Db      1 AGGTGCGAAGCAGACTGAGG 20
|||||
```

```
RESULT 542
US-10-920-612-661
; Sequence 661, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 661
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-661
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3250 GTGCGAAGCAGACTGAGGCT 3269
Db      1 GTGCGAAGCAGACTGAGGCT 20
|||||
```

```
RESULT 543
US-10-920-612-662
; Sequence 662, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; NUMBER OF SEQ ID NOS: 892
; CURRENT APPLICATION NUMBER: US/10/920,612
```

```
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 662
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-662
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3252 GCGAAGCAGACTGAGGCTAC 3271
Db      1 GCGAAGCAGACTGAGGCTAC 20
|||||
```

```
RESULT 544
US-10-920-612-663
; Sequence 663, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 663
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-663
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3254 GAAGCAGACTGAGGCTACCA 3273
Db      1 GAAGCAGACTGAGGCTACCA 20
|||||
```

```
RESULT 545
US-10-920-612-664
; Sequence 664, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 664
```

LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-664

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3256 AGCAGCTGAGGCTACCATG 3275  
DB 1 AGCAGCTGAGGCTACCATG 20

RESULT 546  
US-10-920-612-665  
Sequence 665, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 665  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-665

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3258 CAGACTGAGGCTACCATGAC 3277  
DB 1 CAGACTGAGGCTACCATGAC 20

RESULT 547  
US-10-920-612-666  
Sequence 666, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 666  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-666

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3260 GACTGAGCTACCATGACAT 3279  
DB 1 GACTGAGCTACCATGACAT 20

RESULT 548  
US-10-920-612-667  
Sequence 667, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 667  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-667

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 3262 CTGAGGCTACCATGACATTC 3281  
DB 1 CTGAGGCTACCATGACATTC 20

RESULT 549  
US-10-920-612-668  
Sequence 668, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 668  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-668

Query Match 0.1%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3264 GAGGCTACCATGACATTCAA 3283  
DB 1 GAGGCTACCATGACATTCAA 20

RESULT 550  
US-10-920-612-669  
Sequence 669, Application US/10920612  
Publication No. US2005009088A1

```

; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 669
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-669
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3266 GGCTACGATGACATTCGAAT 3285
Db      1 GGCTACGATGACATTCGAAT 20
```

```

RESULT 551
US-10-920-612-670
; Sequence 670, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 670
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-670
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3268 CTACCATGACATTCGAATAT 3287
Db      1 CTACCATGACATTCGAATAT 20
```

```

RESULT 552
US-10-920-612-696
; Sequence 696, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
```

```

; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 696
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-696
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      3254 GAAGCAGACTGAGGCTACCA 3273
Db      1 GAAGCAGACTGAGGCTACCA 20
```

```

RESULT 553
US-10-920-612-879/C
; Sequence 879, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 879
; LENGTH: 20
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-879
```

```
Query Match      0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      426 AAAGAGGTGTATGGCTTCAA 445
Db      20 AAAGAGGTGTATGGCTTCAA 1
```

```

RESULT 554
US-10-920-612-880/C
; Sequence 880, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 880
; LENGTH: 20
; TYPE: RNA
```

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-880
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 3001 AGAACAGGCACTCTGTGCA 3020
Db 20 AGAACAGGCACTCTGTGCA 1
```

```
RESULT 555
US-10-989-197-4/c
; Sequence 4, Application US/10989197
; Publication No. US20050208588A1
; GENERAL INFORMATION:
; APPLICANT: Ravikumar, Varulinga
; APPLICANT: Manoharan, Muthiah
; APPLICANT: Guzaev, Andrei P.
; APPLICANT: Wang, Zhiwei
; APPLICANT: Kumar, Raju K.
; TITLE OF INVENTION: SUPPORTS FOR OLIGOMER SYNTHESIS
; FILE REFERENCE: DVC00023US.P1
; CURRENT APPLICATION NUMBER: US/10/989,197
; CURRENT FILING DATE: 2004-11-15
; PRIOR APPLICATION NUMBER: 10/770,226
; PRIOR FILING DATE: 2004-02-02
; PRIOR APPLICATION NUMBER: 60/520,179
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: 60/530,477
; PRIOR FILING DATE: 2003-12-16
; PRIOR APPLICATION NUMBER: 60/564,649
; PRIOR FILING DATE: 2004-04-21
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligomeric Compound
US-10-989-197-4
```

```
Query Match 0.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 3249 GGTGCGAAGCAGACTGAGGC 3268
Db 20 GGTGCGAAGCAGACTGAGGC 1
```

```
RESULT 556
US-10-719-900-69473
; Sequence 69473, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 69473
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
```

```
US-10-719-900-69473
```

```
Query Match 0.1%; Score 19.8; DB 1; Length 25;
Best Local Similarity 91.3%; Pred. No. 2.3e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 970 AAGTGACACAGACTTGAACTT 992
Db 1 AAGTGACACAGACTTGAACTT 23
```

```
RESULT 557
US-10-719-900-978317/c
; Sequence 978317, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 978317
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-978317
```

```
Query Match 0.1%; Score 19.8; DB 1; Length 25;
Best Local Similarity 91.3%; Pred. No. 2.3e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 452 GGGCAAGCCTTGAGAGAAA 474
Db 23 GGGCAAGCCTTGAGAGAAA 1
```

```
RESULT 558
US-10-719-956-317915
; Sequence 317915, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 317915
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-317915
```

```
Query Match 0.1%; Score 19.8; DB 1; Length 25;
Best Local Similarity 91.3%; Pred. No. 2.3e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 1749 CAGAGGTTCTTCTGAGACTT 1771
Db 3 CAGAGGTTCTTCTGAGACTT 25
```

```
RESULT 559
US-10-719-956-334238
; Sequence 334238, Application US/10719956
; Publication No. US20040146910A1
```



```
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 334238
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-334238
```

```
Query Match          0.1%; Score 19.8; DB 1; Length 25;
Best Local Similarity 91.3%; Pred. No. 2.3e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      4375 ATACGTTACACATATCATGTGAT 4397
Db      2 AGACGTTCCCACTATCATGTGAT 24
```

```
RESULT 560
US-10-719-956-423854/C
; Sequence 423854, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 423854
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-423854
```

```
Query Match          0.1%; Score 19.8; DB 1; Length 25;
Best Local Similarity 91.3%; Pred. No. 2.3e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      299 GGCTGAGAGTTCAGTGGAGTCC 321
Db      23 GGCTGTGAGTTCCAGTTGAGTTC 1
```

```
RESULT 561
US-09-727-100-6
; Sequence 6, Application US/09727100
; Publication No. US20030018165A1
; GENERAL INFORMATION:
; APPLICANT: INNOGENETICS N.V.
; TITLE OF INVENTION: NEW USES OF SUPPRESSIVE MACROPHAGE ACTIVATION FACTORS.
; FILE REFERENCE: EP99.109.SMAF
; CURRENT APPLICATION NUMBER: US/09/727,100
; CURRENT FILING DATE: 2000-11-30
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-727-100-6
```

```
Query Match          0.1%; Score 19.8; DB 1; Length 26;
```

```
Best Local Similarity 91.3%; Pred. No. 2.4e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1069 AATCCACATCACTCCAAAGCAG 1091
Db      4 AATCCACATCACTCCAAAGCAG 26
```

```
RESULT 562
US-09-813-289-21
; Sequence 21, Application US/09813289
; Patent No. US20020061571A1
; GENERAL INFORMATION:
; APPLICANT: Mahadevan, M.S.
; APPLICANT: Tiscornia, G.
; TITLE OF INVENTION: No. US20020061571A1 isoform of myotonic dystrophy associated pr
; FILE REFERENCE: 800.027051
; CURRENT APPLICATION NUMBER: US/09/813,289
; CURRENT FILING DATE: 2001-03-20
; PRIOR APPLICATION NUMBER: US 60/190,590
; PRIOR FILING DATE: 2000-03-20
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-813-289-21
```

```
Query Match          0.1%; Score 19.4; DB 1; Length 23;
Best Local Similarity 95.2%; Pred. No. 2.3e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      178 TGCTGCTGCTGCTGCTGGCGG 198
Db      3 TGCTGCTGCTGCTGCTGGGCG 23
```

```
RESULT 563
US-10-719-900-274421
; Sequence 274421, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 274421
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-274421
```

```
Query Match          0.1%; Score 19.4; DB 1; Length 25;
Best Local Similarity 95.2%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      1357 TGGTCACTACCTGCTGGGCC 1377
Db      5 TGGTCACTGCTGCTGGGCC 25
```

```
RESULT 564
US-10-719-956-641023
; Sequence 641023, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
```

```
APPLICANT: Xue Mei Zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Rat
FILE REFERENCE: 3527.1
CURRENT APPLICATION NUMBER: US/10/719,956
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,836
PRIOR FILING DATE: 2002.11.20
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 641023
LENGTH: 25
TYPE: DNA
ORGANISM: Rattus norvegicus
US-10-719-956-641023
```

```
Query Match
Best Local Similarity 95.2%; Score 19.4; DB 1; Length 25;
Pred. No. 2.7e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2860 TGGAGGCTCATGTTGCCCTAA 2880
DB 4 TGGAGGCTCATGTTGCCCTAA 24
```

```
RESULT 565
US-09-754-853A-721/c
Sequence 721, Application US/09754853A
Publication No. US20030005491A1
GENERAL INFORMATION:
APPLICANT: Hauge, Brian M.
APPLICANT: Parnell, Laurence D.
APPLICANT: Parsons, Jeremy D.
APPLICANT: Wang, Ming Li
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
FILE REFERENCE: 38-10(15810)B
CURRENT APPLICATION NUMBER: US/09/754,853A
CURRENT FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: US 60/174,880
PRIOR FILING DATE: 2000-01-07
NUMBER OF SEQ ID NOS: 1119
SEQ ID NO 721
LENGTH: 25
TYPE: DNA
ORGANISM: Glycine max
FEATURE:
OTHER INFORMATION: Clone ID: 318013_region_A3_311076_12_Forward_Primer_Seq
US-09-754-853A-721
```

```
Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Pred. No. 2.7e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 1658 CCTCAATGTGTCCAAAGTACAA 1681
DB 24 CTTCAATGTGTGGAAGTACAA 1
```

```
RESULT 566
US-10-719-900-50031/c
Sequence 50031, Application US/10719900
Publication No. US20050026164A1
GENERAL INFORMATION:
APPLICANT: Xue Mei Zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
FILE REFERENCE: 3528.1
CURRENT APPLICATION NUMBER: US/10/719,900
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,808
PRIOR FILING DATE: 2002.11.20
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 50031
```

```
LENGTH: 25
TYPE: DNA
ORGANISM: Mus musculus
US-10-719-900-50031
```

```
Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Pred. No. 2.7e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 1907 GGCTTCCCATATTCGCAATATCTT 1930
DB 24 GGCTGCCAGATTGCCACATCTT 1
```

```
RESULT 567
US-10-719-900-379740
Sequence 379740, Application US/10719900
Publication No. US20050026164A1
GENERAL INFORMATION:
APPLICANT: Xue Mei Zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
FILE REFERENCE: 3528.1
CURRENT APPLICATION NUMBER: US/10/719,900
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,808
PRIOR FILING DATE: 2002.11.20
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 379740
LENGTH: 25
TYPE: DNA
ORGANISM: Mus musculus
US-10-719-900-379740
```

```
Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Pred. No. 2.7e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 4009 TGAATTTGAGATCTCTTGCTT 4032
DB 2 TGAACATGACATTTCTTGCTT 25
```

```
RESULT 568
US-10-719-900-957816/c
Sequence 957816, Application US/10719900
Publication No. US20050026164A1
GENERAL INFORMATION:
APPLICANT: Xue Mei Zhou
TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
FILE REFERENCE: 3528.1
CURRENT APPLICATION NUMBER: US/10/719,900
CURRENT FILING DATE: 2003-11-20
PRIOR APPLICATION NUMBER: 60/427,808
PRIOR FILING DATE: 2002.11.20
NUMBER OF SEQ ID NOS: 982914
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 957816
LENGTH: 25
TYPE: DNA
ORGANISM: Mus musculus
US-10-719-900-957816
```

```
Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Pred. No. 2.7e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 556 TTATCCGAGAGAAAGTGAACCTA 579
DB 24 TTATCCAGAGATGAAGTGAACCA 1
```

```
RESULT 569
```

US-10-809-189-91336  
; Sequence 91336, Application US/10809189  
; Publication No. US20050048531A1  
; GENERAL INFORMATION:  
; APPLICANT: Michael Miltmann  
; APPLICANT: David Mack  
; APPLICANT: David Lockhart  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Methods of Genetic Analysis  
; FILE REFERENCE: 3101.1  
; CURRENT APPLICATION NUMBER: US/10/809,189  
; CURRENT FILING DATE: 2004-03-25  
; PRIOR APPLICATION NUMBER: US/09/396,196  
; PRIOR FILING DATE: 1999-09-15  
; PRIOR APPLICATION NUMBER: 60/100,678  
; PRIOR FILING DATE: 1998-09-17  
; NUMBER OF SEQ ID NOS: 127806  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 91336  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: mus musculus  
US-10-809-189-91336

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 449 TGAGGCAAGCCTGCTGAGAA 472  
DB 1 TGAGGCCAAAGCTGTGCTGAAAGA 24

RESULT 570  
US-10-809-189-115505/c  
; Sequence 115505, Application US/10809189  
; Publication No. US20050048531A1  
; GENERAL INFORMATION:  
; APPLICANT: Michael Miltmann  
; APPLICANT: David Mack  
; APPLICANT: David Lockhart  
; APPLICANT: Affymetrix, Inc.  
; TITLE OF INVENTION: Methods of Genetic Analysis  
; FILE REFERENCE: 3101.1  
; CURRENT APPLICATION NUMBER: US/10/809,189  
; CURRENT FILING DATE: 2004-03-25  
; PRIOR APPLICATION NUMBER: US/09/396,196  
; PRIOR FILING DATE: 1999-09-15  
; PRIOR APPLICATION NUMBER: 60/100,678  
; PRIOR FILING DATE: 1998-09-17  
; NUMBER OF SEQ ID NOS: 127806  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 115505  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: mus musculus  
US-10-809-189-115505

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 172 CTGCGCTGCTGCTGCTGCTGCTG 195  
DB 25 CTTCAGCTGCTGCTGCTGCTGCTAG 2

RESULT 571  
US-10-956-157-110389/c  
; Sequence 110389, Application US/10956157  
; Publication No. US20050118625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wyeth

APPLICANT: Mounts, William  
; TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH  
; TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES  
; FILE REFERENCE: 031896-043000 (AM 101081)  
; CURRENT APPLICATION NUMBER: US/10/956,157  
; CURRENT FILING DATE: 2004-10-04  
; NUMBER OF SEQ ID NOS: 319805  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 110389  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Probe Sequence  
US-10-956-157-110389

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2324 GGTCTTAGTGAGACCACTTGGCTA 2347  
DB 25 GGTCTTAGTGAGCAATTGGCTA 2

RESULT 572  
US-10-956-157-110394/c  
; Sequence 110394, Application US/10956157  
; Publication No. US20050118625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wyeth  
; APPLICANT: Mounts, William  
; TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH  
; TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES  
; FILE REFERENCE: 031896-043000 (AM 101081)  
; CURRENT APPLICATION NUMBER: US/10/956,157  
; CURRENT FILING DATE: 2004-10-04  
; NUMBER OF SEQ ID NOS: 319805  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 110394  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Probe Sequence  
US-10-956-157-110394

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2324 GGTCTTAGTGAGCACTTGGCTA 2347  
DB 24 GGTCTTAGTGAGCAATTGGCTA 1

RESULT 573  
US-10-956-157-203715  
; Sequence 203715, Application US/10956157  
; Publication No. US20050118625A1  
; GENERAL INFORMATION:  
; APPLICANT: Wyeth  
; APPLICANT: Mounts, William  
; TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH  
; TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES  
; FILE REFERENCE: 031896-043000 (AM 101081)  
; CURRENT APPLICATION NUMBER: US/10/956,157  
; CURRENT FILING DATE: 2004-10-04  
; NUMBER OF SEQ ID NOS: 319805  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 203715  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Probe Sequence  
US-10-956-157-203715

Query Match 0.1%; Score 19.2; DB 1; Length 25;

Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2805 GACTCGCTGAGATGGGCTCCAG 2828  
Db 1 GCCTTCACTAGAGATGGATTCAG 24

RESULT 574  
US-10-681-773-8594  
; Sequence 8594, Application US/10681773  
; Publication No. US20040146890A1  
; GENERAL INFORMATION:  
; APPLICANT: Matsuzaki, Hajime  
; APPLICANT: Mei, Rui  
; APPLICANT: Shen, Mei-Mei  
; APPLICANT: Kennedy, Giulia  
; TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans  
; FILE REFERENCE: 3522.2  
; CURRENT APPLICATION NUMBER: US/10/681,773  
; CURRENT FILING DATE: 2003-10-07  
; PRIOR APPLICATION NUMBER: 60/470,475  
; PRIOR FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: 60/417,190  
; PRIOR FILING DATE: 2002-10-08  
; NUMBER OF SEQ ID NOS: 124031  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 8594  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Homo sapien  
US-10-681-773-8594

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4336 ATGTGCAAGATCTGGAGAAACAA 4359  
Db 1 AAGTGCAGAGACCTGGAGAAACAA 24

RESULT 575  
US-10-681-773-26170  
; Sequence 26170, Application US/10681773  
; Publication No. US20040146890A1  
; GENERAL INFORMATION:  
; APPLICANT: Matsuzaki, Hajime  
; APPLICANT: Mei, Rui  
; APPLICANT: Shen, Mei-Mei  
; APPLICANT: Kennedy, Giulia  
; TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans  
; FILE REFERENCE: 3522.2  
; CURRENT APPLICATION NUMBER: US/10/681,773  
; CURRENT FILING DATE: 2003-10-07  
; PRIOR APPLICATION NUMBER: 60/470,475  
; PRIOR FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: 60/417,190  
; PRIOR FILING DATE: 2002-10-08  
; NUMBER OF SEQ ID NOS: 124031  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 26170  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Homo sapien  
US-10-681-773-26170

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4338 GTGCAAGATCTGGAGAAACAA 4361  
|||||

Db 2 GTGCAGAGACCTGGAGAAACATA 25

RESULT 576  
US-10-681-773-88753  
; Sequence 88753, Application US/10681773  
; Publication No. US20040146890A1  
; GENERAL INFORMATION:  
; APPLICANT: Matsuzaki, Hajime  
; APPLICANT: Mei, Rui  
; APPLICANT: Shen, Mei-Mei  
; APPLICANT: Kennedy, Giulia  
; TITLE OF INVENTION: Methods for Genotyping Polymorphisms in Humans  
; FILE REFERENCE: 3522.2  
; CURRENT APPLICATION NUMBER: US/10/681,773  
; CURRENT FILING DATE: 2003-10-07  
; PRIOR APPLICATION NUMBER: 60/470,475  
; PRIOR FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: 60/417,190  
; PRIOR FILING DATE: 2002-10-08  
; NUMBER OF SEQ ID NOS: 124031  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 88753  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Homo sapien  
US-10-681-773-88753

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4336 ATGTGCAAGATCTGGAGAAACAA 4359  
Db 2 AAGTGCAGAGACCTGGAGAAACAA 25

RESULT 577  
US-10-719-956-2047  
; Sequence 2047, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
; FILE REFERENCE: 3527.1  
; CURRENT APPLICATION NUMBER: US/10/719,956  
; CURRENT FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 60/427,836  
; PRIOR FILING DATE: 2002-11-20  
; NUMBER OF SEQ ID NOS: 659466  
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
; SEQ ID NO 2047  
; LENGTH: 25  
; TYPE: DNA  
; ORGANISM: Rattus norvegicus  
US-10-719-956-2047

Query Match 0.1%; Score 19.2; DB 1; Length 25;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1085 AAGCAGGCCGAGGCTGTTTGA 1108  
Db 2 AAGCAGGCCGAGGCTGTTTCA 25

RESULT 578  
US-10-719-956-76637/c  
; Sequence 76637, Application US/10719956  
; Publication No. US20040146910A1  
; GENERAL INFORMATION:  
; APPLICANT: Xue Mei Zhou  
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat

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; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO: 76637
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-76637

```

```

Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy 4511 GGGACCAAGATGTTGCTTCACT 4534
Db 24 GGGACCAAGATGTTGCTTCTGT 1

```

```

RESULT 579
US-10-719-956-180320
; Sequence 180320, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO: 180320
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-180320

```

```

Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy 2000 TCCAACTGTCATGAGCTTCAGAAA 2023
Db 2 TCCAACTGTCCTGAGCTTCACAGA 25

```

```

RESULT 580
US-10-719-956-285873/C
; Sequence 285873, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO: 285873
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-285873

```

```

Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

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Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 1226 CTTGCCACAGCTGATTGAGGTGTC 1249
Db 24 CTAGACACAGCTGATTGAGGTTTC 1

```

```

RESULT 581
US-10-719-956-445951
; Sequence 445951, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO: 445951
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-445951

```

```

Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy 2883 GCTGGAAGCTGAAGTTTATCATT 2906
Db 2 GCTGGGAGCTGAAGTTCATCATT 25

```

```

RESULT 582
US-10-719-956-499936/C
; Sequence 499936, Application US/10719956
; Publication No. US20040146910A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Rat
; FILE REFERENCE: 3527.1
; CURRENT APPLICATION NUMBER: US/10/719,956
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,836
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 699466
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO: 499936
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Rattus norvegicus
US-10-719-956-499936

```

```

Query Match
Best Local Similarity 0.1%; Score 19.2; DB 1; Length 25;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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```

Qy 4557 CAGCATTTGTTTGTCAAAAGATC 4580
Db 24 CAGCATTTGTTTGTGAAGAGAGAC 1

```

```

RESULT 583
US-10-741-601-26342/C
; Sequence 26342, Application US/10741601
; Publication No. US2004016519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; STENOSIS, METHODS OF DETECTION AND USES THEREOF

```

```
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 26342
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-601-26342

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
Pred. No. 2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

QY 421 CCTGAAAGAGCTGTATGC 439
DB 19 CCTGAAAGAGCTGTATGC 1

RESULT 584
US-10-712-795-871/c
; Sequence 871, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 871
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-871

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
Pred. No. 2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

QY 3250 GTGCGAAGCAGCTGAGGC 3268
DB 19 GTGCGAAGCAGCTGAGGC 1

RESULT 585
US-10-920-612-871/c
; Sequence 871, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 871
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-871

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
Pred. No. 2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

QY 3250 GTGCGAAGCAGCTGAGGC 3268
DB 19 GTGCGAAGCAGCTGAGGC 1

RESULT 586
US-10-741-600-73750/c
; Sequence 73750, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 73750
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-73750

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 19;
Pred. No. 2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

QY 421 CCTGAAAGAGCTGTATGC 439
DB 19 CCTGAAAGAGCTGTATGC 1

RESULT 587
US-10-922-544-26/c
; Sequence 26, Application US/10922544
; Publication No. US20050153915A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response
; FILE REFERENCE: 400/204 (MBHB03-939-B)
; CURRENT APPLICATION NUMBER: US/10/922,544
; CURRENT FILING DATE: 2004-08-19
; PRIOR APPLICATION NUMBER: US 60/512,701
; PRIOR FILING DATE: 2003-10-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
```

```

; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 26
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-922-544-26
```

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      19  GCTGCTGCTGCTGCTGCTG 1
```

```

RESULT 588
US-10-922-544-200
; Sequence 200, Application US/10922544
; Publication No. US20050153915A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response
; FILE REFERENCE: 400/204 (MBH03-939-B)
; CURRENT APPLICATION NUMBER: US/10/922,544
; PRIOR FILING DATE: 2004-08-19
; PRIOR APPLICATION NUMBER: US 60/512,701
; PRIOR FILING DATE: 2003-10-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 200
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-922-544-200
```

```

Query Match          0.1%; Score 19; DB 1; Length 19;
Best Local Similarity 68.4%; Pred. No. 2e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      1  GCTGCTGCTGCTGCTGCTG 19
```

```

RESULT 589
US-10-371-474-63/c
; Sequence 63, Application US/10371474
; Publication No. US20030144242A1
; GENERAL INFORMATION:
; APPLICANT: Donna T. Ward
; APPLICANT: William Gaarde
; APPLICANT: Brett P. Monti
; APPLICANT: Jacqueline Wyatt
; TITLE OF INVENTION: ANTISENSE MODULATION OF MEKK4 EXPRESSION
; FILE REFERENCE: RTS-0169
; CURRENT APPLICATION NUMBER: US/10/371,474
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US/09/676,436
; PRIOR FILING DATE: 2000-09-29
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 63
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-371-474-63
```

```

Query Match          0.1%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      20 GCTGCTGCTGCTGCTGCTG 2
```

```

RESULT 590
US-10-741-601-26341/c
; Sequence 26341, Application US/10741601
; Publication No. US20040166519A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001500
; CURRENT APPLICATION NUMBER: US/10/741,601
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 26415
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 26341
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-601-26341
```

```

Query Match          0.1%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

Qy      422 CCTGAAAGAGGTGTATGCG 440
Db      19 CCTGAAAGAGGTGTATGCG 1
```

```

RESULT 591
US-10-712-795-326/c
; Sequence 326, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF ADOLIPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```

; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 326
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-326

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGCTCAAGCAGAGG 3250
DB 20 TTGTAAGCTCAAGCAGAGG 2

RESULT 592
US-10-712-795-688
; Sequence 688, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 688
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-688

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGCTCAAGCAGAGG 3250
DB 1 TTGTAAGCTCAAGCAGAGG 19

RESULT 593
US-10-920-612-326/c
; Sequence 326, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 326
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

```

; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-326 ...

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGCTCAAGCAGAGG 3250
DB 20 TTGTAAGCTCAAGCAGAGG 2

RESULT 594
US-10-920-612-688
; Sequence 688, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 688
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-688

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3232 TTGTAAGCTCAAGCAGAGG 3250
DB 1 TTGTAAGCTCAAGCAGAGG 19

RESULT 595
US-10-741-600-73749/c
; Sequence 73749, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 73749
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-73749

Query Match
Best Local Similarity 100.0%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 422 CCTGAAGAGGTGTATGCC 440
DB 19 CCTGAAGAGGTGTATGCC 1

RESULT 596
```



```
US-09-888-326-240
; Sequence 240, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; FILE REFERENCE: C1039/7052 (AMS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 240
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (0) ... (0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-240
```

```
Query Match 0.1%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 176 GCTGCTGCTGCTGCTGCTG 194
Db 3 GCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 597
US-09-776-479-780
; Sequence 780, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 780
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-780
```

```
Query Match 0.1%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 176 GCTGCTGCTGCTGCTGCTG 194
Db 3 GCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 598
US-09-776-479-780
; Sequence 780, Application US/09776479
; Publication No. US20040067902A9
```

```
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 780
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-780
```

```
Query Match 0.1%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 176 GCTGCTGCTGCTGCTGCTG 194
Db 3 GCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 599
US-10-112-653-753
; Sequence 753, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; FILE REFERENCE: C01039/70060 (AMS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 753
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-753
```

```
Query Match 0.1%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 176 GCTGCTGCTGCTGCTGCTG 194
Db 3 GCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 600
US-10-017-995-780
; Sequence 780, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
```

; PRIOR APPLICATION NUMBER: US 60/255,534  
; PRIOR FILING DATE: 2000-12-14  
; NUMBER OF SEQ ID NOS: 1093  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO: 780  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-017-995-780

Query Match 0.1%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194  
DB 3 GCTGCTGCTGCTGCTGCTG 21

RESULT 601  
US-10-314-578-780  
; Sequence 780, Application US/10314578  
; Publication No. US20030212026A1  
; GENERAL INFORMATION:  
; APPLICANT: Krieg, Arthur M.  
; APPLICANT: Schetter, Christian  
; APPLICANT: Vollmer, Jorg  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids  
; FILE REFERENCE: C1039/7035 (HCL/MAT)  
; CURRENT APPLICATION NUMBER: US/10/314,578  
; PRIOR FILING DATE: 2002-12-09  
; PRIOR APPLICATION NUMBER: US 60/156,113  
; PRIOR FILING DATE: 1999-09-25  
; PRIOR APPLICATION NUMBER: US 60/156,135  
; PRIOR FILING DATE: 1999-09-27  
; PRIOR APPLICATION NUMBER: US 60/227,436  
; PRIOR FILING DATE: 2000-08-23  
; NUMBER OF SEQ ID NOS: 1145  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO: 780  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-314-578-780

Query Match 0.1%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194  
DB 3 GCTGCTGCTGCTGCTGCTG 21

RESULT 602  
US-10-831-778-780  
; Sequence 780, Application US/10831778  
; Publication No. US20040255774A1  
; GENERAL INFORMATION:  
; APPLICANT: Bratzler, Robert L.  
; APPLICANT: Petersen, Deanna M.  
; APPLICANT: Pouron, Yves  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
; TITLE OF INVENTION: Treatment of Asthma and Allergy  
; FILE REFERENCE: C1037/7013 (HCL/MAT)  
; CURRENT APPLICATION NUMBER: US/10/831,778  
; PRIOR FILING DATE: 2004-04-23  
; PRIOR APPLICATION NUMBER: US 60/179,991  
; PRIOR FILING DATE: 2000-02-03

; NUMBER OF SEQ ID NOS: 1093  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO: 780  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-831-778-780

Query Match 0.1%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194  
DB 3 GCTGCTGCTGCTGCTGCTG 21

RESULT 603  
US-10-738-642-25/C  
; Sequence 25, Application US/10738642  
; Publication No. US20040241854A1  
; GENERAL INFORMATION:  
; APPLICANT: Paulson, Henry  
; APPLICANT: Miller, Victor  
; APPLICANT: University of Iowa Research Foundation  
; TITLE OF INVENTION: siRNA-Mediated Gene Silencing  
; FILE REFERENCE: 875.101US1  
; CURRENT APPLICATION NUMBER: US/10/738,642  
; PRIOR FILING DATE: 2003-12-16  
; PRIOR APPLICATION NUMBER: US 10/212,322  
; PRIOR FILING DATE: 2002-08-05  
; PRIOR APPLICATION NUMBER: US 10/322,086  
; PRIOR FILING DATE: 2002-12-17  
; PRIOR APPLICATION NUMBER: US 10/430,351  
; PRIOR FILING DATE: 2003-05-05  
; PRIOR APPLICATION NUMBER: PCT/US03/16887  
; PRIOR FILING DATE: 2003-05-26  
; NUMBER OF SEQ ID NOS: 90  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO: 25  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-738-642-25

Query Match 0.1%; Score 19; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194  
DB 22 GCTGCTGCTGCTGCTGCTG 4

RESULT 604  
US-10-738-642-26  
; Sequence 26, Application US/10738642  
; Publication No. US20040241854A1  
; GENERAL INFORMATION:  
; APPLICANT: Paulson, Henry  
; APPLICANT: Miller, Victor  
; APPLICANT: University of Iowa Research Foundation  
; TITLE OF INVENTION: siRNA-Mediated Gene Silencing  
; FILE REFERENCE: 875.101US1  
; CURRENT APPLICATION NUMBER: US/10/738,642  
; PRIOR FILING DATE: 2003-12-16  
; PRIOR APPLICATION NUMBER: US 10/212,322  
; PRIOR FILING DATE: 2002-08-05  
; PRIOR APPLICATION NUMBER: US 10/322,086  
; PRIOR FILING DATE: 2002-12-17  
; PRIOR APPLICATION NUMBER: US 10/430,351

```
;; PRIOR FILING DATE: 2003-05-05
;; PRIOR APPLICATION NUMBER: PCT/US03/16887
;; PRIOR FILING DATE: 2003-05-26
;; NUMBER OF SEQ ID NOS: 90
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 26
;; LENGTH: 22
;; TYPE: DNA
;; ORGANISM: Homo sapiens
US-10-738-642-26
```

```
Query Match          0.1%; Score 19; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      3 GCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 605
US-09-848-754A-9122/c
; Sequence 9122, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: MBHB00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; PRIOR FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9122
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic acid
US-09-848-754A-9122
```

```
Query Match          0.1%; Score 19; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      21 GCTGCTGCTGCTGCTGCTG 3
```

```
RESULT 606
US-09-848-754A-9375
```

```
; Sequence 9375, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: MBHB00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; PRIOR FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 9375
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic acid
; NAME/KEY: misc_feature
; LOCATION: (1)-(1)
; OTHER INFORMATION: n strands for inverted deoxyabasic derivative
; NAME/KEY: misc_feature
```

```
; LOCATION: (25)-(25)
; OTHER INFORMATION: n strands for inverted deoxyabasic derivative
; NAME/KEY: misc_feature
; LOCATION: (2)-(8)
; OTHER INFORMATION: 2'-O-Methyl
; NAME/KEY: misc_feature
; LOCATION: (18)-(24)
; OTHER INFORMATION: 2'-O-Methyl
; NAME/KEY: misc_feature
; LOCATION: (9)-(17)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
US-09-848-754A-9375
```

```
Query Match          0.1%; Score 19; DB 1; Length 25;
Best Local Similarity 84.2%; Pred. No. 2.9e+02;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      176 GCTGCTGCTGCTGCTGCTG 194
Db      4 GCTGCTGCTGCTGCTGCTG 22
```

```
RESULT 607
US-10-028-415-27
```

```
; Sequence 27, Application US/10028415
; Publication No. US20020151063A1
; GENERAL INFORMATION:
; APPLICANT: Lasham, Annette
; TITLE OF INVENTION: Methods for Modulating Apoptotic Cell
; FILE REFERENCE: 11000.1004c3
; CURRENT APPLICATION NUMBER: US/10/028,415
; PRIOR FILING DATE: 2001-12-20
; PRIOR APPLICATION NUMBER: PCT/NZ01/00286
; PRIOR FILING DATE: 2001-11-28
; PRIOR APPLICATION NUMBER: US 09/724,809
; PRIOR FILING DATE: 2000-11-28
; PRIOR APPLICATION NUMBER: US 09/036,004
; PRIOR FILING DATE: 1998-03-04
; PRIOR APPLICATION NUMBER: US 08/713,557
; PRIOR FILING DATE: 1996-08-30
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Human
US-10-028-415-27
```

```
Query Match          0.1%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 2.6e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      176 GCTGCTGCTGCTGCTGCTGCG 197
Db      1 GCTGCTGCTGCTGCTGCTGCTG 22
```

```
RESULT 608
US-10-719-900-87305/c
; Sequence 87305, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002 11 20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
```

```
; SEQ ID NO 87305
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-87305
```

```
Query Match
Best Local Similarity 90.9%; Pred. No. 3.1e+02; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 2368 AGCAGATATGTTAATGGAAT 2389
DB 23 AGCAGATATGTTAATGGAAT 2
```

```
RESULT 609
US-10-719-900-87306/c
; Sequence 87306, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 87306
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-87306
```

```
Query Match
Best Local Similarity 90.9%; Pred. No. 3.1e+02; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 2368 AGCAGATATGTTAATGGAAT 2389
DB 23 AGCAGATATGTTAATGGAAT 2
```

```
RESULT 610
US-10-719-900-92872
; Sequence 92872, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 92872
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-92872
```

```
Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 2372 CAAACGAGGTGATCCACCT 2993
DB 2 CAAACGAGGTGATCCACCT 23
```

```
RESULT 611
US-10-719-900-382365
; Sequence 382365, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 382365
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-382365
```

```
Query Match
Best Local Similarity 90.9%; Pred. No. 3.1e+02; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 3665 CACAGCACCAGTGTAGTACC 3686
DB 4 CACAGCCTCCAGTGTAGTACC 25
```

```
RESULT 612
US-10-719-900-569110
; Sequence 569110, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 569110
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-569110
```

```
Query Match
Best Local Similarity 90.9%; Pred. No. 3.1e+02; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY 330 GCTGATTCAGAAGTGCACCA 351
DB 1 GCTGATTCAGAAGTGCACCA 22
```

```
RESULT 613
US-10-719-900-617142/c
; Sequence 617142, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; CURRENT FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; PRIOR FILING DATE: 2002-11-20
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 617142
```

```

; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-617142

```

```

Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1696 TCAGAAAGCTGCATCCAGGC 1717
DB 23 TCAGAAAGATCTATCCAGGC 2

```

```

RESULT 614
US-10-719-900-733961/c
; Sequence 733961, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 733961
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-733961

```

```

Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 4115 TCTGCCATCTCGAAGTTCCAA 4136
DB 23 TCTGCCATCTCGAAGTTCCAA 2

```

```

RESULT 615
US-10-719-900-777576/c
; Sequence 777576, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 777576
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-777576

```

```

Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1030 AAGTACTAAGAGATGGCCT 1051
DB 23 AAGTACTAAGAGATGGCCT 2

```

RESULT 616

```

US-10-719-900-828845/c
; Sequence 828845, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 828845
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-828845

```

```

Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 3416 TCAGAACAGAAATTACTGAG 3437
DB 23 TTGAACAGAGATTACTGAG 2

```

```

RESULT 617
US-10-719-900-874435/c
; Sequence 874435, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 874435
; LENGTH: 25
; TYPE: DNA
; ORGANISM: Mus musculus
US-10-719-900-874435

```

```

Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 1610 TATGGCCAAACATGAGCAG 1631
DB 24 TATGGCCAAACATGAGCAG 3

```

```

RESULT 618
US-10-719-900-942364/c
; Sequence 942364, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
; APPLICANT: Xue Mei Zhou
; TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
; FILE REFERENCE: 3528.1
; CURRENT APPLICATION NUMBER: US/10/719,900
; PRIOR FILING DATE: 2003-11-20
; PRIOR APPLICATION NUMBER: 60/427,808
; NUMBER OF SEQ ID NOS: 982914
; SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 942364
; LENGTH: 25

```

TYPE: DNA  
ORGANISM: Mus musculus  
US-10-719-900-942364

Query Match 0.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 3.1e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1626 GAGCAGTTACTCCAGACTCA 1647  
DB 25 GAGCAGTTCTCCAGACTCA 4

RESULT 619  
US-10-809-189-63175/c  
Sequence 63175, Application US/10809189  
Publication No. US2005048531A1  
GENERAL INFORMATION:  
APPLICANT: Michael Miltmann  
APPLICANT: David Lockhart  
APPLICANT: Affymetrix, Inc.  
TITLE OF INVENTION: Methods of Genetic Analysis  
FILE REFERENCE: 3101.1  
CURRENT APPLICATION NUMBER: US/10/809,189  
CURRENT FILING DATE: 2004-03-25  
PRIOR APPLICATION NUMBER: US/09/396,196  
PRIOR FILING DATE: 1999-09-15  
PRIOR APPLICATION NUMBER: 60/100,678  
PRIOR FILING DATE: 1998-09-17  
NUMBER OF SEQ ID NOS: 127806  
SOFTWARE: FASTSEQ for Windows Version 4.0  
SEQ ID NO 63175  
LENGTH: 25  
TYPE: DNA  
ORGANISM: mus musculus  
US-10-809-189-63175

Query Match 0.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 3.1e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3330 GATTGTGATGTGACCTCGGAA 3351  
DB 22 GATTGTGATGTGACCTCGGCA 1

RESULT 620  
US-10-719-956-66741/c  
Sequence 66741, Application US/10719956  
Publication No. US20040146910A1  
GENERAL INFORMATION:  
APPLICANT: Xue Mei Zhou  
TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
FILE REFERENCE: 3527.1  
CURRENT APPLICATION NUMBER: US/10/719,956  
CURRENT FILING DATE: 2003-11-20  
PRIOR APPLICATION NUMBER: 60/427,836  
PRIOR FILING DATE: 2002-11-20  
NUMBER OF SEQ ID NOS: 699466  
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
SEQ ID NO 66741  
LENGTH: 25  
TYPE: DNA  
ORGANISM: Rattus norvegicus  
US-10-719-956-66741

Query Match 0.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 3.1e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2368 AGCAGATATGTGTAATGGAAT 2389  
|||||

DB 23 AGCAGATATGTGTAATGGAAT 2

RESULT 621  
US-10-719-956-66742/c  
Sequence 66742, Application US/10719956  
Publication No. US20040146910A1  
GENERAL INFORMATION:  
APPLICANT: Xue Mei Zhou  
TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
FILE REFERENCE: 3527.1  
CURRENT APPLICATION NUMBER: US/10/719,956  
CURRENT FILING DATE: 2003-11-20  
PRIOR APPLICATION NUMBER: 60/427,836  
PRIOR FILING DATE: 2002-11-20  
NUMBER OF SEQ ID NOS: 699466  
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
SEQ ID NO 66742  
LENGTH: 25  
TYPE: DNA  
ORGANISM: Rattus norvegicus  
US-10-719-956-66742

Query Match 0.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 3.1e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2368 AGCAGATATGTGTAATGGAAT 2389  
DB 23 AGCAGATATGTGTAATGGAAT 2

RESULT 622  
US-10-719-956-407405  
Sequence 407405, Application US/10719956  
Publication No. US20040146910A1  
GENERAL INFORMATION:  
APPLICANT: Xue Mei Zhou  
TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
FILE REFERENCE: 3527.1  
CURRENT APPLICATION NUMBER: US/10/719,956  
CURRENT FILING DATE: 2003-11-20  
PRIOR APPLICATION NUMBER: 60/427,836  
PRIOR FILING DATE: 2002-11-20  
NUMBER OF SEQ ID NOS: 699466  
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
SEQ ID NO 407405  
LENGTH: 25  
TYPE: DNA  
ORGANISM: Rattus norvegicus  
US-10-719-956-407405

Query Match 0.1%; Score 18.8; DB 1; Length 25;  
Best Local Similarity 90.9%; Pred. No. 3.1e+02;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3330 GCTGATTCAAGAGTCCACCA 351  
DB 1 GCTGATTCAAGAGTCCACCA 22

RESULT 623  
US-10-719-956-431938  
Sequence 431938, Application US/10719956  
Publication No. US20040146910A1  
GENERAL INFORMATION:  
APPLICANT: Xue Mei Zhou  
TITLE OF INVENTION: Methods of Genetic Analysis of Rat  
FILE REFERENCE: 3527.1  
CURRENT APPLICATION NUMBER: US/10/719,956  
CURRENT FILING DATE: 2003-11-20  
PRIOR APPLICATION NUMBER: 60/427,836  
PRIOR FILING DATE: 2002-11-20

```
NUMBER OF SEQ ID NOS: 699466
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 431938
LENGTH: 25
TYPE: DNA
ORGANISM: Rattus norvegicus
US-10-719-956-431938
```

```
Query Match
Best Local Similarity 0.1%; Score 18.8; DB 1; Length 25;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 399 ATCTGAAGACCGCCAGTCGA 420
Db 3 ATCTGAACACCGCCAGTCGA 24
```

```
RESULT 624
US-09-563-728A-6
Sequence 6, Application US/09563728A
Publication No. US20030078216A1
GENERAL INFORMATION:
APPLICANT: Macleod, Alan R
APPLICANT: Li, Zoumei
TITLE OF INVENTION: Inhibition of Histone Deacetylase
FILE REFERENCE: 106101.229
CURRENT APPLICATION NUMBER: US/09/563,728A
CURRENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/112,287
PRIOR FILING DATE: 1999-05-03
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-09-563-728A-6
```

```
Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 178 TGCTGCTGCTGCTGCTGCG 197
Db 1 TGCTGCTGCTGCTGCTGCG 20
```

```
RESULT 625
US-09-563-728A-15
Sequence 15, Application US/09563728A
Publication No. US20030078216A1
GENERAL INFORMATION:
APPLICANT: Macleod, Alan R
APPLICANT: Li, Zoumei, Jeffrey M
TITLE OF INVENTION: Inhibition of Histone Deacetylase
FILE REFERENCE: 106101.229
CURRENT APPLICATION NUMBER: US/09/563,728A
CURRENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/132,287
PRIOR FILING DATE: 1999-05-03
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 15
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: modified_base
```

```
LOCATION: 1-4 and 17-20 are modified
OTHER INFORMATION: Positions 1-4 and 17-20 are 2'-methoxyribose
OTHER INFORMATION: substituted nucleotides; positions 5-16 are
US-09-563-728A-15
```

```
Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 17; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 178 TGCTGCTGCTGCTGCTGCG 197
Db 1 UGCUGCTGCTGCTGCTGCG 20
```

```
RESULT 626
US-10-145-493B-51
Sequence 51, Application US/10145493B
Publication No. US20030096777A1
GENERAL INFORMATION:
APPLICANT: Beuterman, Jeffrey
APPLICANT: Macleod, Robert
APPLICANT: Siders, William
TITLE OF INVENTION: Modulation of Gene Expression by Combination Therapy
FILE REFERENCE: MET-015DV
CURRENT APPLICATION NUMBER: US/10/145,493B
CURRENT FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 09/420,692
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: US 60/104,804
PRIOR FILING DATE: 1998-10-19
NUMBER OF SEQ ID NOS: 90
SOFTWARE: PatentIn version 3.0
SEQ ID NO 51
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: primer
US-10-145-493B-51
```

```
Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 178 TGCTGCTGCTGCTGCTGCG 197
Db 1 TGCTGCTGCTGCTGCTGCG 20
```

```
RESULT 627
US-10-289-762-4805/c
Sequence 4805, Application US/10289762
Publication No. US20040006218A1
GENERAL INFORMATION:
APPLICANT: Griffiths, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevent
FILE REFERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/10/289,762
CURRENT FILING DATE: 2003-03-27
NUMBER OF SEQ ID NOS: 6849
SEQ ID NO 4805
LENGTH: 20
TYPE: DNA
ORGANISM: Chlamydia pneumoniae
US-10-289-762-4805
```

```
Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY      2878 TAAAGCTGGAGCTGAAG 2897
      |||||
Db      20 TAAAGCTGGAGCTGAAG 1

RESULT 628
US-10-301-832-12/c
; Sequence 12, Application US/10301832
; Publication No. US20040102390A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth W. Doble
; TITLE OF INVENTION: MODULATION OF NOTCH3 EXPRESSION
; FILE REFERENCE: RTS-0414
; CURRENT APPLICATION NUMBER: US/10/301,832
; CURRENT FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 155
; SEQ ID NO 12
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-301-832-12

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      180 CTGCTGCTGCTGCGGCGG 199
      |||||
Db      20 CTGCTGCTGCTGCGGCGG 1

RESULT 629
US-10-301-832-90
; Sequence 90, Application US/10301832
; Publication No. US20040102390A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth W. Doble
; TITLE OF INVENTION: MODULATION OF NOTCH3 EXPRESSION
; FILE REFERENCE: RTS-0414
; CURRENT APPLICATION NUMBER: US/10/301,832
; CURRENT FILING DATE: 2002-11-21
; NUMBER OF SEQ ID NOS: 155
; SEQ ID NO 90
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-301-832-90

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      180 CTGCTGCTGCTGCGGCGG 199
      |||||
Db      1 CTGCTGCTGCTGCGGCGG 20

RESULT 630
US-10-712-795-319/c
; Sequence 319, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2003-11-13
```

```
      ; PRIOR FILING DATE: 2002-11-13
      ; PRIOR APPLICATION NUMBER: PCT/US03/15493
      ; PRIOR FILING DATE: 2003-05-13
      ; NUMBER OF SEQ ID NOS: 892
      ; SEQ ID NO 319
      ; LENGTH: 20
      ; TYPE: DNA
      ; ORGANISM: Artificial Sequence
      ; FEATURE:
      ; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-319

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      3249 GGTGGAGGAGGAGTGAAGC 3268
      |||||
Db      20 GCGCGGAGGAGGAGTGAAGC 1

RESULT 631
US-10-712-795-327/c
; Sequence 327, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 327
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-327

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY      3234 GTAACCTCAGCAGAGGTGC 3253
      |||||
Db      20 GTAACCTCAGCAGAGGTGC 1

RESULT 632
US-10-712-795-328/c
; Sequence 328, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 328
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```



OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-328

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3236 AACTCAGCAGAGGTGCGA 3255  
DB 20 AACTCAGCAGAGGTGCGA 1

RESULT 633  
US-10-712-795-329/C  
Sequence 329, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 329  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-329

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3238 CTCAGCAGAGGTGCGCAG 3257  
DB 20 CTCAGCAGAGGTGCGCAG 1

RESULT 634  
US-10-712-795-330/C  
Sequence 330, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 330  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-330

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3244 CAGAGGTGCGAGCAGACT 3263  
DB 20 CAGAGGTGCGAGCAGACT 1

DB 20 CAGAGGTGCGAGCAGACT 1

RESULT 635  
US-10-712-795-331/C  
Sequence 331, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 331  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-331

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3246 GAAGTGCAGAGCAGACTGA 3265  
DB 20 GAAGTGCAGAGCAGACTGA 1

RESULT 636  
US-10-712-795-332/C  
Sequence 332, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 332  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-332

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3248 AGGTGCGAAGCAGACTGAG 3267  
DB 20 AGGTGCGAAGCAGACTGAG 1

RESULT 637  
US-10-712-795-333/C  
Sequence 333, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.

```

; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 333
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-333

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3250 GTGCGAAGCAGACTGAGGCT 3269
DB      20 GCGCGAAGCAGACTGAGGCT 1

RESULT 638
US-10-712-795-515/c
; Sequence 515, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 515
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-515

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3244 CAGAAGTGGCAGAGCACT 3263
DB      20 CAGAAGCGCCGAGAGCACT 1

RESULT 639
US-10-712-795-684
; Sequence 684, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 684
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-684

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3234 GTAAGTCAAGCAGAGGTCG 3253
DB      1 GTAAGTCAAGCAGAGGTCG 20

RESULT 641
US-10-712-795-690
; Sequence 690, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 690
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-690

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3236 AACTCAAGCAGAGAGTCCGA 3255
DB      1 AACTCAAGCAGAGAGTCCGA 20

RESULT 640
US-10-712-795-689
; Sequence 689, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 689
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-689

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3249 GGTGCGAAGCAGACTGAGGC 3268
DB      1 GCGCGAAGCAGACTGAGGC 20

; SEQ ID NO 684
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-684

Query Match          0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
RESULT 642
US-10-712-795-691
; Sequence 691, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 2003-05-13
; SEQ ID NO 691
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-691
```

```
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3238 CTCAGCAGAAAGTCGCGAAG 3257
Db 1 CTCAGCAGAAAGCGCGCGAAG 20
```

```
RESULT 643
US-10-712-795-692
; Sequence 692, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 2003-05-13
; SEQ ID NO 692
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-692
```

```
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3244 CAGAGGTGCGAAGCACT 3263
Db 1 CAGAGGTGCGAAGCACT 20
```

```
RESULT 644
US-10-712-795-693
; Sequence 693, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 693
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-693
```

```
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3246 GAAGTCCGAGCACTGA 3265
Db 1 GAAGTCCGAGCACTGA 20
```

```
RESULT 645
US-10-712-795-694
; Sequence 694, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 2003-05-13
; SEQ ID NO 694
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-694
```

```
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3248 AGGTGCGAAGCACTGAGG 3267
Db 1 AGGTGCGAAGCACTGAGG 20
```

```
RESULT 646
US-10-712-795-695
; Sequence 695, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; NUMBER OF SEQ ID NOS: 2003-05-13
; SEQ ID NO 695
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-712-795-695
```

```
Query Match 0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

QY 3250 GTGCGAGCAGACTGAGGCT 3263  
1 |||||  
Db 1 GCGCGAGCAGACTGAGGCT 20

```

RESULT 647
US-10-712-795-697
; Sequence 697, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/33662
; CURRENT APPLICATION NUMBER: US/10/712,795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 697
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; US-10-712-795-697

```

Query Match	0.1%;	Score 18.4;	DB 1;	Length 20;
Best Local Similarity	95.0%;	Pred. No. 2.5e+02;		
Matches 19;	Conservative	0;	Mismatches 1;	Indels 0;
			Gaps	0

Dy 324 CAGAGGTCCGAGCAGACT 3263  
|||  
Db 1 CAGAAAGCGCGAAGCAGACT 20

```

RESULT 648
US-10-712-795-864/C
; Sequence 864, Application US/10712795
; Publication No. US20040214325A1
;
; GENERAL INFORMATION:
;   APPLICANT: Crooke et al.
;   TITLE OF INVENTION: ANTISENSE MODULATION OF APOLOPROTEIN B EXPRESSION
;   FILE REFERENCE: 30566/39662
;   CURRENT APPLICATION NUMBER: US/10/712.795
;   CURRENT FILING DATE: 2003-11-13
;   PRIOR APPLICATION NUMBER: US 60/426,234
;   PRIOR FILING DATE: 2002-11-13
;   PRIOR APPLICATION NUMBER: PCT/US03/15493
;   PRIOR FILING DATE: 2003-05-13
;   NUMBER OF SEQ ID NOS: 892
;   SEQ ID NO 864
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
;   US-10-712-795-864

```

Query Match	0.1%;	Score 18.4;	DB 1;	Length 20;
Best Local Similarity	95.0%;	Pred. No. 2.5e+02;		
Matches 19;	Conservative	0;	Mismatches 1;	Indels 0;
				Gaps 0

```

QY      3249 GGTGGAAGCAGACTGAGGC 3268
          |||||
Db      20 GGTGGAAGAGACTGAGGC 1

```

RESULT 649  
US-10-920-612-319/c  
; Sequence 319, Application US/10920612  
; Publication No. US20050009088A1  
; GENERAL INFORMATION:

```

? APPLICANT: Ciocke et al.
? TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
? FILE REFERENCE: 30566/39634A
? CURRENT APPLICATION NUMBER: US/10/920,612
? CURRENT FILING DATE: 2004-08-17
? PRIOR APPLICATION NUMBER: PCT/US03/15493
? PRIOR FILING DATE: 2003-11-15
? PRIOR APPLICATION NUMBER: US 10/712,795
? PRIOR FILING DATE: 2003-11-13
? PRIOR APPLICATION NUMBER: US 60/426,234
? PRIOR FILING DATE: 2002-11-13
? NUMBER OF SEQ ID NOS: 892
? SEQ ID NO 319
? LENGTH: 20
? TYPE: DNA
? ORGANISM: Artificial Sequence
? FEATURE:
? OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-319

```

Query Match	0.1%;	Score 18.4;	DB 1;	Length 20;
Best Local Similarity	95.0%;	Pred. No. 2.5e+02;		
Matches 19; Conservative	0;	Mismatches 1;	Indels 0;	Gaps 0;

QY 3249 GGTGGAGCAGACTGAGGC 3268  
|||  
Db 20 GGCGCGAAGCAGACTGAGGC 1

```

RESULT 650
US-10-920-612-327/c
; Sequence 327, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: CROOKE et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 327
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-327

```

Query Match	0.1%;	Score 18.4;	DB 1;	length 20;
Best Local Similarity	95.0%;	Pred. No. 2.5e+02;		
Matches 19; Conservative	0;	Mismatches 1;	Indels 0;	Gaps 0;

```

QY      3234 GTAACCTAAGCAGCAAGCTGC 3253
          |||||
Db      20  GTAACCTAAGCAGCAAGCTGC 1

```

```

RESULT 651
US-10-920-612-328/c
; Sequence 328, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17

```

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; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 328
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-328

Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3236 AACTCAGCAGAGGCGCGA 3255
Db 20 AACTCAGCAGAGGCGCGA 1

RESULT 652
US-10-920-612-329/c
; Sequence 329, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 329
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-329

Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3238 CTCAGCAGAGGCGCGAG 3257
Db 20 CTCAGCAGAGGCGCGAG 1

RESULT 653
US-10-920-612-330/c
; Sequence 330, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
```

```

; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 330
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-330

Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3244 CAGAGGCGGAGGCGAGCT 3263
Db 20 CAGAGGCGGAGGCGAGCT 1

RESULT 654
US-10-920-612-331/c
; Sequence 331, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 331
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-331

Query Match
Best Local Similarity 0.1%; Score 18.4; DB 1; Length 20;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3246 GAGGTGCGAGCGAGCTGA 3265
Db 20 GAGGTGCGAGCGAGCTGA 1

RESULT 655
US-10-920-612-332/c
; Sequence 332, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT FILING DATE: 2004-08-17
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 332
; LENGTH: 20
; TYPE: DNA
```

ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-332

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3248 AGGTGCGAAGCAGACTGAGC 3267  
DB 20 AGGCGGAGCAGACACTGAGC 1

RESULT 656  
US-10-920-612-333/c  
Sequence 333, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 333  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-333

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3250 GTGCGAAGCAGACTGAGC 3269  
DB 20 GCGCGAAGCAGACTGAGC 1

RESULT 657  
US-10-920-612-515/c  
Sequence 515, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 515  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-515

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3244 CAGAAAGTGGCAGACACT 3263  
DB 20 CAGAAAGTGGCAGACACT 1

RESULT 658  
US-10-920-612-684  
Sequence 684, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 684  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-684

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGACTGAGC 3268  
DB 1 GCGCGAAGCAGACTGAGC 20

RESULT 659  
US-10-920-612-689  
Sequence 689, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT FILING DATE: 2004-08-17  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 689  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-689

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3234 GTAACCTAAGCAGAAAGTGC 3253  
DB 1 GTAACCTAAGCAGAAAGTGC 20

```

RESULT 660
US-10-920-612-690
; Sequence 690, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 690
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-690

```

```

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      3236 AACTCAGCAGAGGTGCGA 3255
Db      1 AACTCAGCAGAGGCGCGA 20

```

```

RESULT 661
US-10-920-612-691
; Sequence 691, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 691
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-691

```

```

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      3238 CTCAGCAGAGGTGCGAAG 3257
Db      1 CTCAGCAGAGGCGCGAAG 20

```

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RESULT 662
US-10-920-612-692
; Sequence 692, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 692
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-692

```

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; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 692
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-692

```

```

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      3244 CAGAGGTGCGAGCAGACT 3263
Db      1 CAGAGGCGCGAGCAGACT 20

```

```

RESULT 663
US-10-920-612-693
; Sequence 693, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 693
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
US-10-920-612-693

```

```

Query Match      0.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.5e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY      3246 GAAGTGCAGACGACTGA 3265
Db      1 GAAGGCGCGAGCAGACTGA 20

```

```

RESULT 664
US-10-920-612-694
; Sequence 694, Application US/10920612
; Publication No. US20050009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 694

```

LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-694

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3248 AGGTGCGAAGCAGACTGAGG 3267  
DB 1 AGGTGCGAAGCAGACTGAGG 20

RESULT 665  
US-10-920-612-695  
Sequence 695, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 695  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-695

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3250 GTGCGAAGCAGACTGAGGCT 3269  
DB 1 GGTGCGAAGCAGACTGAGGCT 20

RESULT 666  
US-10-920-612-697  
Sequence 697, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 697  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
US-10-920-612-697

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3244 CAGAGGTGCGAAGCAGACT 3263  
DB 1 CAGAGGTGCGAAGCAGACT 20

RESULT 667  
US-10-920-612-864/c  
Sequence 864, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 864  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-864

Query Match 0.1%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 2.5e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
DB 20 GGTGCGAAGCAGACTGAGGC 1

RESULT 668  
US-10-380-195A-15/c  
Sequence 15, Application US/10380195A  
Publication No. US20040072776A1  
GENERAL INFORMATION:  
APPLICANT: Gleave, Martin  
APPLICANT: Kiyama, Satoshi  
APPLICANT: Nelson, Colleen  
APPLICANT: Renne, Paul  
TITLE OF INVENTION: Oligodeoxynucleotides for Prostate and Endocrine Tumor Therapy  
FILE REFERENCE: UBC-P-023  
CURRENT APPLICATION NUMBER: US/10/380,195A  
CURRENT FILING DATE: 2003-03-12  
PRIOR APPLICATION NUMBER: PCT/US01/28748  
PRIOR FILING DATE: 2001-09-13  
PRIOR APPLICATION NUMBER: US 60/232,641  
PRIOR FILING DATE: 2000-09-14  
NUMBER OF SEQ ID NOS: 63  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 15  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: IGFBP2 antisense  
US-10-380-195A-15

Query Match 0.1%; Score 18.4; DB 1; Length 21;  
Best Local Similarity 95.0%; Pred. No. 2.7e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 194



Db 20 CGCTGCTGCTGCTACTG 1

RESULT 669

US-10-479-306-9/c  
; Sequence 9, Application US/10479306  
; Publication No. US20040235158A1  
; GENERAL INFORMATION:  
; APPLICANT: The Walter and Eliza Hall Institute of Medical Research  
; APPLICANT: Bartlett, Perry (US only)  
; APPLICANT: Rietze, Rodney (US only)  
; TITLE OF INVENTION: A method of purification of cells  
; FILE REFERENCE: 2529269/ESH  
; CURRENT APPLICATION NUMBER: US/10/479,306  
; PRIOR FILING DATE: 2003-11-28  
; PRIOR APPLICATION NUMBER: PR5403  
; PRIOR FILING DATE: 2001-06-01  
; NUMBER OF SEQ ID NOS: 86  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 9  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc feature  
; LOCATION: (1..1)  
; OTHER INFORMATION: mRyk (sense)  
US-10-479-306-9

Query Match 0.1%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 2.7e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1890 CAAGTGAAGAACTTTGTGCGC 1909

Db 20 CAAGTGAACAACCTTTGTGCGC 1

RESULT 670

US-10-357-488-20  
; Sequence 20, Application US/10357488  
; Publication No. US20030194730A1  
; GENERAL INFORMATION:  
; APPLICANT: Centre For DNA Fingerprinting and Diagnostics  
; TITLE OF INVENTION: No. US20030194730A1 FISSR-PCR primers and markers and a method  
; TITLE OF INVENTION: Primers and markers for identifying genetic constitution and bre  
; TITLE OF INVENTION: variants.  
; FILE REFERENCE: 782-Indian  
; CURRENT APPLICATION NUMBER: US/10/357,488  
; CURRENT FILING DATE: 2003-02-04  
; PRIOR APPLICATION NUMBER: 260/MAS/2002  
; PRIOR FILING DATE: 2002-04-08  
; NUMBER OF SEQ ID NOS: 37  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 20  
; LENGTH: 23  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: A novel FISSR-PCR primer for genotyping eukaryotes  
US-10-357-488-20

Query Match 0.1%; Score 18.4; DB 1; Length 23;

Best Local Similarity 95.0%; Pred. No. 3.1e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 174 GCCTGCTGCTGCTGCTGCT 193

Db 4 GAGCTGCTGCTGCTGCTGCT 23

RESULT 671

US-10-257-158A-4582/c

; Sequence 4582, Application US/10257158A  
; Publication No. US20050142543A1  
; GENERAL INFORMATION:  
; APPLICANT: Barany, Francis  
; APPLICANT: Zilvi, Monib  
; APPLICANT: Gerry, Norman P.  
; APPLICANT: Favis, Reyna  
; APPLICANT: Kliman, Richard  
; TITLE OF INVENTION: METHOD OF DESIGNING ADDRESSABLE ARRAY FOR DETECTION OF NUCLEIC ACI  
; TITLE OF INVENTION: SEQUENCE DIFFERENCES USING LIGASE DETECTION REACTION  
; FILE REFERENCE: 19603/2834  
; CURRENT APPLICATION NUMBER: US/10/257,158A  
; PRIOR FILING DATE: 2002-10-07  
; PRIOR APPLICATION NUMBER: PCT/US01/10958  
; PRIOR FILING DATE: 2001-04-04  
; PRIOR APPLICATION NUMBER: US 60/197,271  
; PRIOR FILING DATE: 2000-04-14  
; NUMBER OF SEQ ID NOS: 9544  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 4582  
; LENGTH: 24  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Hypothetical Probe Sequence  
US-10-257-158A-4582

Query Match 0.1%; Score 18.2; DB 1; Length 24;

Best Local Similarity 87.0%; Pred. No. 3.5e+02;

Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4647 AGGATCTTACACTGCGCGCT 4669

Db 23 AGGCACTTACACTGCTGCGCT 1

RESULT 672

US-10-360-854-11/c  
; Sequence 11, Application US/10360854  
; Publication No. US20040157220A1  
; GENERAL INFORMATION:  
; APPLICANT: Kurmool, Purnima  
; APPLICANT: Wo, Betty  
; APPLICANT: Banks, Peter  
; TITLE OF INVENTION: Method and Apparatus for Sample Tracking  
; FILE REFERENCE: 10255-020-999  
; CURRENT APPLICATION NUMBER: US/10/360,854  
; CURRENT FILING DATE: 2003-02-10  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 11  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: mammalian  
US-10-360-854-11

Query Match 0.1%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 2.5e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTG 194

Db 18 CTGCTGCTGCTGCTGCTG 1

RESULT 673

US-10-712-795-872/c  
; Sequence 872, Application US/10712795  
; Publication No. US20040214325A1  
; GENERAL INFORMATION:  
; APPLICANT: Crooke et al.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
; FILE REFERENCE: 30566/39662

```
; CURRENT APPLICATION NUMBER: US/10/712.795
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 872
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-872

Query Match
Best Local Similarity 100.0%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3251 TCGGAGCAGACTGAGGC 3268
DB 18 TCGGAGCAGACTGAGGC 1

RESULT 674
US-10-712-795-874/c
; Sequence 874, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712.795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 874
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-874

Query Match
Best Local Similarity 0.1%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3250 GTGCGAAGCAGACTGAGG 3267
DB 18 GTGCGAAGCAGACTGAGG 1

RESULT 675
US-10-920-612-872/c
; Sequence 872, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892

; SEQ ID NO 872
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Unknown Organism

; SEQ ID NO 872
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-872

Query Match
Best Local Similarity 100.0%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3250 GTGCGAAGCAGACTGAGG 3267
DB 18 GTGCGAAGCAGACTGAGG 1

RESULT 676
US-10-920-612-874/c
; Sequence 874, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 874
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-874

Query Match
Best Local Similarity 0.1%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3250 GTGCGAAGCAGACTGAGG 3267
DB 18 GTGCGAAGCAGACTGAGG 1

RESULT 677
US-10-479-472A-11/c
; Sequence 11, Application US/10479472A
; Publication No. US20050118581A1
; GENERAL INFORMATION:
; APPLICANT: DEL-FAVERO, JURGEN PETER LODI
; APPLICANT: VAN BROECKHOVEN, CHRISTINE
; TITLE OF INVENTION: NOVEL BRAIN EXPRESSED GENE AND PROTEIN ASSOCIATED WITH
; TITLE OF INVENTION: BIPOLEAR DISORDER
; FILE REFERENCE: JAB-1711
; CURRENT APPLICATION NUMBER: US/10/479,472A
; PRIOR FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: PCT/EP02/06316
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: EP 01202214.1
; PRIOR FILING DATE: 2001-06-11
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 11
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Unknown Organism
```

```
FEATURE:
OTHER INFORMATION: Description of Unknown Organism: Illustrative
OTHER INFORMATION: oligonucleotide
US-10-479-472A-11

Query Match
Best Local Similarity 0.1%; Score 18; DB 1; Length 18;
Matches 18; Conservative 0; Pred. No. 2.5e+02; Mismatches 0; Indels 0; Gaps 0;

OY 177 CTGCTGCTGCTGCTGCTG 194
DB 18 CTGCTGCTGCTGCTGCTG 1

RESULT 678
US-10-479-510-11
Sequence 11, Application US/10479510
Publication No. US20040157230A1
GENERAL INFORMATION:
APPLICANT: Cavidi Tech AB
TITLE OF INVENTION: A method for measuring DNA polymerization and
FILE REFERENCE: 110063501
CURRENT APPLICATION NUMBER: US/10/479,510
PRIOR FILING DATE: 2003-12-10
PRIOR APPLICATION NUMBER: US 60/297,773
NUMBER OF SEQ ID NOS: 12
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 11
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: template
US-10-479-510-11

Query Match
Best Local Similarity 0.1%; Score 18; DB 1; Length 21;
Matches 18; Conservative 0; Pred. No. 3.1e+02; Mismatches 0; Indels 0; Gaps 0;

OY 177 CTGCTGCTGCTGCTGCTG 194
DB 1 CTGCTGCTGCTGCTGCTG 18

RESULT 679
US-09-946-374-105
Sequence 105, Application US/09946374
Publication No. US20030073129A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Deenoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Watanabe, Colin K.
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

```
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830PICI
CURRENT APPLICATION NUMBER: US/09/946,374
CURRENT FILING DATE: 2001-09-04
PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098723
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098749
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098803
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098821
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098843
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/099536
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099596
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099598
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099602
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099642
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099741
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099754
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099763
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099792
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099808
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099812
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099815
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/099816
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: 60/100385
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/100388
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/100390
PRIOR FILING DATE: 1998-09-15
PRIOR APPLICATION NUMBER: 60/100584
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100627
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100661
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100662
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100664
PRIOR FILING DATE: 1998-09-16
PRIOR APPLICATION NUMBER: 60/100683
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100684
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100710
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100711
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100848
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/100849
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/100919
```

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PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100930
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/101014
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101068
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101071
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101279
PRIOR FILING DATE: 1998-09-22
PRIOR APPLICATION NUMBER: 60/101471
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101472
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101474
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101475
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101476
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101477
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101479
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101738
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101741
PRIOR FILING DATE: 1998-09-24
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PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101915
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PRIOR APPLICATION NUMBER: 60/101916
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/102207
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PRIOR APPLICATION NUMBER: 60/102240
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PRIOR APPLICATION NUMBER: 60/102307
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102330
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PRIOR APPLICATION NUMBER: 60/102331
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102484
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102487
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102570
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102571
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102684
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102687
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102965
PRIOR FILING DATE: 1998-10-02
PRIOR APPLICATION NUMBER: 60/103258
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103314
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103315
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103328
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103395
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103396
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103401
PRIOR FILING DATE: 1998-10-07

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PRIOR APPLICATION NUMBER: 60/103449
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103633
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103678
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103679
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103711
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/104257
PRIOR FILING DATE: 1998-10-14
PRIOR APPLICATION NUMBER: 60/104987
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105000
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105002
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105104
PRIOR FILING DATE: 1998-10-21
PRIOR APPLICATION NUMBER: 60/105169
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105266
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105693
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105694
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105807

```

```

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3,3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 175 CGCTGCTGCTGCTGCTGCTG 195
DB 1 CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 680
US-10-006-856A-105
Sequence 105, Application US/10006856A
Publication No. US20030044841A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan J.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Guiney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Paoni, Nicholas F.
APPLICANT: Pan, James
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830PIC14
CURRENT APPLICATION NUMBER: US/10/006,856A
NUMBER OF SEQ ID NOS: 477
Prior Application removed - See File Wrapper or Palm
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-856A-105

```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
      |||||
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 681
US-10-006-818A-105
; Sequence 105, Application US/10006818A
; Publication No. US20030054406A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Paul J.
; APPLICANT: Gurney, Christopher J.
; APPLICANT: Hillan, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C4
; CURRENT APPLICATION NUMBER: US/10/006,818A
; PRIOR FILING DATE: 2001-12-06
; PRIOR APPLICATION removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-818A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
      |||||
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 682
US-10-006-485A-105
; Sequence 105, Application US/10006485A
; Publication No. US20030064062A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C9
; CURRENT APPLICATION NUMBER: US/10/006,485A
; PRIOR FILING DATE: 2001-12-06
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099602
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099642
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; PRIOR APPLICATION NUMBER: 60/099741
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099754
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099763
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099792
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099808
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099812
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099815
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/099816
; PRIOR FILING DATE: 1998-09-10
; PRIOR APPLICATION NUMBER: 60/100385
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100388
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100390
; PRIOR FILING DATE: 1998-09-15
; PRIOR APPLICATION NUMBER: 60/100584
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100627
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100661
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100662
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100664
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: 60/100683
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100684
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100710
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100711
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100848
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/100849
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/100919
; PRIOR FILING DATE: 1998-09-17
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PRIOR APPLICATION NUMBER: 60/100930  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/101014  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101068  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101071  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101279  
PRIOR FILING DATE: 1998-09-22  
PRIOR APPLICATION NUMBER: 60/101471  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101472  
PRIOR FILING DATE: 1998-09-23  
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PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101475  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101476  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101477  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101479  
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PRIOR FILING DATE: 1998-09-24  
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PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102240  
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PRIOR APPLICATION NUMBER: 60/102487  
PRIOR FILING DATE: 1998-09-30  
PRIOR APPLICATION NUMBER: 60/102570  
PRIOR FILING DATE: 1998-09-30  
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PRIOR APPLICATION NUMBER: 60/102687  
PRIOR FILING DATE: 1998-10-01  
PRIOR APPLICATION NUMBER: 60/102965  
PRIOR FILING DATE: 1998-10-02  
PRIOR APPLICATION NUMBER: 60/103258  
PRIOR FILING DATE: 1998-10-06  
PRIOR APPLICATION NUMBER: 60/103314  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103315  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103328  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103395  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103396  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103401  
PRIOR FILING DATE: 1998-10-07  
PRIOR APPLICATION NUMBER: 60/103449

PRIOR FILING DATE: 1998-10-06  
PRIOR APPLICATION NUMBER: 60/103633  
PRIOR FILING DATE: 1998-10-08  
PRIOR APPLICATION NUMBER: 60/103678  
PRIOR FILING DATE: 1998-10-08  
PRIOR APPLICATION NUMBER: 60/103679  
PRIOR FILING DATE: 1998-10-08  
PRIOR APPLICATION NUMBER: 60/103711  
PRIOR FILING DATE: 1998-10-08  
PRIOR APPLICATION NUMBER: 60/104257  
PRIOR FILING DATE: 1998-10-14  
PRIOR APPLICATION NUMBER: 60/104987  
PRIOR FILING DATE: 1998-10-20  
PRIOR APPLICATION NUMBER: 60/105000  
PRIOR FILING DATE: 1998-10-20  
PRIOR APPLICATION NUMBER: 60/105002  
PRIOR FILING DATE: 1998-10-20  
PRIOR APPLICATION NUMBER: 60/105104  
PRIOR FILING DATE: 1998-10-21  
PRIOR APPLICATION NUMBER: 60/105169  
PRIOR FILING DATE: 1998-10-22  
PRIOR APPLICATION NUMBER: 60/105266  
PRIOR FILING DATE: 1998-10-22  
PRIOR APPLICATION NUMBER: 60/105693  
PRIOR FILING DATE: 1998-10-26  
PRIOR APPLICATION NUMBER: 60/105694  
PRIOR FILING DATE: 1998-10-26  
PRIOR APPLICATION NUMBER: 60/105807  
PRIOR FILING DATE: 1998-10-27  
PRIOR APPLICATION NUMBER: 60/105881  
PRIOR FILING DATE: 1998-10-27  
PRIOR APPLICATION NUMBER: 60/105882  
PRIOR FILING DATE: 1998-10-27  
PRIOR APPLICATION NUMBER: 60/106023  
PRIOR FILING DATE: 1998-10-28

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 683  
US-10-013-907A-105  
Sequence 105, Application US/10013907A  
Publication No. US20030064925A1  
GENERAL INFORMATION:  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Denoyers, Luc  
APPLICANT: Eaton, Dan I.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, Christopher J.  
APPLICANT: Gutney, Austin L.  
APPLICANT: Hillan, Kenneth J.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
TITLE OR INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2830F1C34  
CURRENT FILING DATE: 2001-12-10  
Prior Application removed - See file wrapper or Palm  
NUMBER OF SEQ ID NOS: 477  
SEQ ID NO 105  
LENGTH: 21

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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-907A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 684
US-10-015-499A-105
Sequence 105, Application US/10015499A
Publication No. US20030065142A1
```

GENERAL INFORMATION:

```
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnovers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
```

```
APPLICANT: Paoli, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C42
CURRENT APPLICATION NUMBER: US/10/015.499A
CURRENT FILING DATE: 2001-12-11
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-499A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 685
US-10-015-933A-105
Sequence 105, Application US/10015333A
Publication No. US20030069179A1
```

GENERAL INFORMATION:

```
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnovers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
```

```
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
```

```
APPLICANT: Paoli, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C46
CURRENT APPLICATION NUMBER: US/10/015.393A
CURRENT FILING DATE: 2002-06-10
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-933A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 686
US-10-015-869A-105
Sequence 105, Application US/10015869A
Publication No. US20030073130A1
```

GENERAL INFORMATION:

```
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnovers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
```

```
APPLICANT: Paoli, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C45
CURRENT APPLICATION NUMBER: US/10/015.869A
CURRENT FILING DATE: 2002-06-25
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-869A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 687
US-10-012-121A-105
```

```
/ Sequence 105, Application US/10012121A
/ Publication No. US20030073810A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ FILE REFERENCE: P2830P1C20
/ CURRENT FILING DATE: 2001-12-07
/ PRIOR APPLICATION NUMBER: US/10/012,121A
/ CURRENT FILING DATE: 2001-12-07
/ PRIOR APPLICATION NUMBER: US/10/012,121A
/ NUMBER OF SEQ ID NOS: 477
/ SEQ ID NO 105
/ LENGTH: 21
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-121A-105
```

```
Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Cy 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21
```

```
RESULT 688
US-10-006-116A-105
/ Sequence 105, Application US/10006116A
/ Publication No. US20030082626A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ FILE REFERENCE: P2830P1C15
/ CURRENT APPLICATION NUMBER: US/10/006,116A
/ CURRENT FILING DATE: 2001-12-16
/ PRIOR APPLICATION NUMBER: 60/098716
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098723
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098749
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098750
/ PRIOR FILING DATE: 1998-09-01
```

```
/ PRIOR APPLICATION NUMBER: 60/098803
/ PRIOR FILING DATE: 1998-09-02
/ PRIOR APPLICATION NUMBER: 60/098821
/ PRIOR FILING DATE: 1998-09-02
/ PRIOR APPLICATION NUMBER: 60/098843
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/ PRIOR APPLICATION NUMBER: 60/101471
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;; PRIOR APPLICATION NUMBER: 60/103711  
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;; PRIOR FILING DATE: 1998-10-14

;; PRIOR APPLICATION NUMBER: 60/104987  
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;; PRIOR FILING DATE: 1998-10-20  
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;; PRIOR FILING DATE: 1998-10-20  
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;; PRIOR APPLICATION NUMBER: 60/105693  
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;; PRIOR FILING DATE: 1998-10-26  
;; PRIOR APPLICATION NUMBER: 60/105807  
;; PRIOR FILING DATE: 1998-10-27  
;; PRIOR APPLICATION NUMBER: 60/105881  
;; PRIOR FILING DATE: 1998-10-27  
;; PRIOR APPLICATION NUMBER: 60/105882  
;; PRIOR FILING DATE: 1998-10-27  
;; PRIOR APPLICATION NUMBER: 60/106023  
;; PRIOR FILING DATE: 1998-10-28

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 689  
US-10-006-117A-105  
; Sequence 105, Application US/1006117A  
; Publication No. US20030082627A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Botstein, David  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Eaton, Dan I.  
; APPLICANT: Ferrara, Napoleone  
; APPLICANT: Fong, Sherman  
; APPLICANT: Gao, Wei-Olang  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Grimaldi, Christopher J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Hillan, Kenneth J.  
; APPLICANT: Pan, James  
; APPLICANT: Paoni, Nicholas F.  
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
; FILE REFERENCE: P2830PIC13  
; CURRENT APPLICATION NUMBER: US/10/006,117A  
; Prior Application removed - See File Wrapper or Palm  
; PRIOR FILING DATE: 2001-07-09  
; NUMBER OF SEQ ID NOS: 477  
; SEQ ID NO 105  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide probe  
US-10-006-117A-105

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
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Db 1 CGCTGCTGCTGCTGCTGCTG 21  
RESULT 690  
US-10-017-527A-105  
; Sequence 105, Application US/10017527A  
; Publication No. US20030082628A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Kevin P.  
; APPLICANT: Bolstein, David  
; APPLICANT: Desnoyers, Luc  
; APPLICANT: Eaton, Dan L.  
; APPLICANT: Ferrara, Napoleone  
; APPLICANT: Fong, Sherman  
; APPLICANT: Gao, Wei-Qiang  
; APPLICANT: Goddard, Audrey  
; APPLICANT: Godowski, Paul J.  
; APPLICANT: Grimaldi, Christopher J.  
; APPLICANT: Gurney, Austin L.  
; APPLICANT: Hillan, Kenneth J.  
; APPLICANT: Pan, James  
; APPLICANT: Paoni, Nicholas F.  
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
; TITLE OF INVENTION: Acids Encoding the Same  
; FILE REFERENCE: P2830PIC3  
; CURRENT APPLICATION NUMBER: US/10/017,527A  
; CURRENT FILING DATE: 2001-12-13  
; PRIOR APPLICATION NUMBER: 60/098716  
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; PRIOR APPLICATION NUMBER: 60/098723  
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; PRIOR APPLICATION NUMBER: 60/102484  
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9  PRIOR FILING DATE: 1998-10-01
10 PRIOR APPLICATION NUMBER: 60/102965
11 PRIOR FILING DATE: 1998-10-02
12 PRIOR APPLICATION NUMBER: 60/103258
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25 PRIOR FILING DATE: 1998-10-07
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34 PRIOR APPLICATION NUMBER: 60/103711
35 PRIOR FILING DATE: 1998-10-08
36 PRIOR APPLICATION NUMBER: 60/104257
37 PRIOR FILING DATE: 1998-10-14
38 PRIOR APPLICATION NUMBER: 60/104287
39 PRIOR FILING DATE: 1998-10-20
40 PRIOR APPLICATION NUMBER: 60/105000
41 PRIOR FILING DATE: 1998-10-20
42 PRIOR APPLICATION NUMBER: 60/105002
43 PRIOR FILING DATE: 1998-10-20
44 PRIOR APPLICATION NUMBER: 60/105104
45 PRIOR FILING DATE: 1998-10-21
46 PRIOR APPLICATION NUMBER: 60/105169
47 PRIOR FILING DATE: 1998-10-22
48 PRIOR APPLICATION NUMBER: 60/105266
49 PRIOR FILING DATE: 1998-10-22
50 PRIOR APPLICATION NUMBER: 60/105293
51 PRIOR FILING DATE: 1998-10-26
52 PRIOR APPLICATION NUMBER: 60/105994
53 PRIOR FILING DATE: 1998-10-26
54 PRIOR APPLICATION NUMBER: 60/105807
55 PRIOR FILING DATE: 1998-10-27
56 PRIOR APPLICATION NUMBER: 60/105881
57 PRIOR FILING DATE: 1998-10-27
58 PRIOR APPLICATION NUMBER: 60/105882
59 PRIOR FILING DATE: 1998-10-27
60 PRIOR APPLICATION NUMBER: 60/106023
61 PRIOR FILING DATE: 1998-10-28

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Query Match	0.1%	Score 17.8	DB 1	Length 21
Best Local Similarity	90.5%	Pred. No. 3.3e+02		
Matches 19; Conservative	0	Mismatches 2	Indels 0	Gaps 0
QY	175	CGCTGCGCTGCTGCTGCTGCG	195	
Db	1	CGCTGCTGCTGCTGCTGCTGCG	21	
RESULT 691				
RS-10-013-913A-105				

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? Sequence 105, Application US/10013913A
? Publication No. US20030083462A1
? GENERAL INFORMATION:
? APPLICANT: Baker, Kevin P.
? APPLICANT: Botstein, David
? APPLICANT: Desnoyers, Luc
? APPLICANT: Eaton, Dan I.
? APPLICANT: Ferrara, Napoleone
? APPLICANT: Fong, Sherman
? APPLICANT: Gao, Wei-Qiang
? APPLICANT: Goddard, Audrey
? APPLICANT: Godowski, Paul J.
? APPLICANT: Grimaldi, Christopher J.
? APPLICANT: Gurney, Austin L.
? APPLICANT: Hillan, Kenneth U.
? APPLICANT: Pan, James
? APPLICANT: Paoli, Nicholas F.
? TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
? FILE REFERENCE: P2830P1C40
? CURRENT FILING DATE: 2002-07-15
? Prior Application removed - See File Wrapper or Palm
? NUMBER OF SEQ ID NOS: 477
? SEQ ID NO 105
? LENGTH: 21
? TYPE: DNA
? ORGANISM: Artificial Sequence
? FEATURES:
? OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-913A-105

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Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTGCTG 195
      |||||
Db      1 CGTGTGCTGTGTTGCTCTCTG 21

RESULT 692
US-10-007-194A-105
; Sequence 105, Application US/10007194A
; Publication No. US20030092061A1
GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Geo, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Peoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C6
CURRENT APPLICATION NUMBER: US/10/007,194A
CURRENT FILING DATE: 2002-06-25
PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098723
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098749
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-01

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; PRIOR APPLICATION NUMBER: 60/104987
; PRIOR FILING DATE: 1998-10-20
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; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105002
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105104
; PRIOR FILING DATE: 1998-10-21
; PRIOR APPLICATION NUMBER: 60/105169
; PRIOR FILING DATE: 1998-10-22
; PRIOR APPLICATION NUMBER: 60/105266
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; PRIOR APPLICATION NUMBER: 60/105693
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; PRIOR APPLICATION NUMBER: 60/105807
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105881
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105882
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/106023
; PRIOR FILING DATE: 1998-10-28
```

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Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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QY      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
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RESULT 693
US-10-013-430A-105
; Sequence 105, Application US/10013430A
; Publication No. US20030092883A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Bolstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C31
; CURRENT APPLICATION NUMBER: US/10/013.430A
; PRIOR FILING DATE: 2002-06-25
; PRIOR APPLICATION removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-430A-105
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Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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```
QY      175 CGCTGCTGCTGCTGCTGCTGG 195
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```

Db      1 CGCTGCTGCTGCTGCTGCTGG 21

RESULT 694
US-10-011-671A-105
; Sequence 105, Application US/10011671A
; Publication No. US20030096954A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Bolstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C27
; CURRENT APPLICATION NUMBER: US/10/011.671A
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
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;; PRIOR FILING DATE: 1998-10-28

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 175 CGCTGCTGCTGCTGCTG 195  
Db 1 CGCTGCTGCTGCTGCTG 21

RESULT 695  
US-10-012-755A-105  
; Sequence 105, Application US/10012755A

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Publication No. US20030096955A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C28
CURRENT APPLICATION NUMBER: US/10/012,755A
PRIORITY FILING DATE: 2002-06-10
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-755A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 696
US-10-015-386A-105
Sequence 105, Application US/10015386A
Publication No. US200300969625A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C55
CURRENT APPLICATION NUMBER: US/10/015,386A
PRIORITY FILING DATE: 2001-12-12
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-386A-105
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Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 697
US-10-011-692A-105
Sequence 105, Application US/10011692A
Publication No. US20030109672A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830P1C30
CURRENT APPLICATION NUMBER: US/10/011,692A
PRIORITY FILING DATE: 2001-12-07
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-011-692A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 698
US-10-006-768A-105
Sequence 105, Application US/10006768A
Publication No. US20030113793A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
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; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC10
; CURRENT APPLICATION NUMBER: US/10/006,768A
; CURRENT FILING DATE: 2002-03-05
; NUMBER OF SEQ ID NOS: 477
; Prior Application removed - See File Wrapper or Paim
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-006-768A-105

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db       1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 699
US-10-017-610A-105
; Sequence 105, Application US/10017610A
; Publication No. US20030113795A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Deanoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Guiney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pao, Nicholas F.
; APPLICANT: Pan, James
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC64
; CURRENT APPLICATION NUMBER: US/10/017,610A
; CURRENT FILING DATE: 2001-12-13
; PRIOR APPLICATION NUMBER: 60/098716
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PRIOR FILING DATE: 1998-10-26
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PRIOR FILING DATE: 1998-10-27

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PRIOR APPLICATION NUMBER: 60/105881
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105882
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/106023
PRIOR FILING DATE: 1998-10-28

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Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

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RESULT 700
US-10-006-063A-105
; Sequence 105, Application US/10006063A
; Publication No. US20030114652A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Bolstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan 1.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C3
; CURRENT APPLICATION NUMBER: US/10/006,063A
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-063A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 701
US-10-020-063A-105
; Sequence 105, Application US/10020063A
; Publication No. US20030119097A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Bolstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan 1.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.

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; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Guiney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C65
; CURRENT APPLICATION NUMBER: US/10/020,063A
; CURRENT FILING DATE: 2002-09-04
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-020-063A-105

Query Match
Best Local Similarity 0.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 702
US-10-015-391A-105
; Sequence 105, Application US/10015391A
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Guiney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C59
; CURRENT APPLICATION NUMBER: US/10/015,391A
; CURRENT FILING DATE: 2001-12-12

```

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; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-015-391A-105

Query Match
Best Local Similarity 0.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 703
US-10-017-407A-105
; Sequence 105, Application US/10017407A
; Publication No. US20030125535A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Guiney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C61
; CURRENT APPLICATION NUMBER: US/10/017,407A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-017-407A-105

Query Match
Best Local Similarity 0.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 704
US-10-011-833A-105
; Sequence 105, Application US/10011833A
; Publication No. US20030129650A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman

```

```

; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC22
; CURRENT APPLICATION NUMBER: US/10/011.833A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-011-833A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```

RESULT 705
US-10-006-041A-105
; Sequence 105, Application US/10006041A
; Publication No. US20030130490A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC8
; CURRENT APPLICATION NUMBER: US/10/006.041A
; CURRENT FILING DATE: 2001-12-06
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-041A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```

RESULT 706
US-10-015-822A-105
; Sequence 105, Application US/10015822A
; Publication No. US20030130491A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC38
; CURRENT APPLICATION NUMBER: US/10/015.822A
; CURRENT FILING DATE: 2002-06-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-822A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21
```

```

RESULT 707
US-10-015-387A-105
; Sequence 105, Application US/10015387A
; Publication No. US20030135034A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC54
; CURRENT APPLICATION NUMBER: US/10/015.387A
; CURRENT FILING DATE: 2001-12-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
```

```

; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-387A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 708
US-10-006-130A-105
; Sequence 105, Application US/10006130A
; Publication No. US20030148375A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C7
; CURRENT APPLICATION NUMBER: US/10/006,130A
; PRIORITY FILING DATE: 2002-03-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-130A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 709
US-10-006-172A-105
; Sequence 105, Application US/10006172A
; Publication No. US20030153000A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C11
; CURRENT APPLICATION NUMBER: US/10/006,172A
; PRIORITY FILING DATE: 2002-03-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-172A-105
```

```

; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C11
; CURRENT APPLICATION NUMBER: US/10/006,172A
; PRIORITY FILING DATE: 2002-03-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-172A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 709
US-10-006-172A-105
; Sequence 105, Application US/10006172A
; Publication No. US20030153000A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C11
; CURRENT APPLICATION NUMBER: US/10/006,172A
; PRIORITY FILING DATE: 2002-03-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-006-172A-105
```

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PRIOR APPLICATION NUMBER: 60/100848
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/100849
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/100919
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/100930
PRIOR FILING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 60/101014
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101068
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101071
PRIOR FILING DATE: 1998-09-18
PRIOR APPLICATION NUMBER: 60/101279
PRIOR FILING DATE: 1998-09-22
PRIOR APPLICATION NUMBER: 60/101471
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101472
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101474
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101475
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101476
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101477
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101479
PRIOR FILING DATE: 1998-09-23
PRIOR APPLICATION NUMBER: 60/101738
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101741
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101743
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101915
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/101916
PRIOR FILING DATE: 1998-09-24
PRIOR APPLICATION NUMBER: 60/102207
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102240
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102307
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102330
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102331
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102484
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102487
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102570
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102571
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102684
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102687
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102965
PRIOR FILING DATE: 1998-10-02
PRIOR APPLICATION NUMBER: 60/103258
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103314
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103315
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103338
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103395

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PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103396
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103401
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103449
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103633
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103678
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103679
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103711
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/104257
PRIOR FILING DATE: 1998-10-14
PRIOR APPLICATION NUMBER: 60/104987
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105000
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105002
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105104
PRIOR FILING DATE: 1998-10-21
PRIOR APPLICATION NUMBER: 60/105169
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105266
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105693
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105694
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105807
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105881
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105882
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/106023
PRIOR FILING DATE: 1998-10-28

```

```

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY 175 CGCTGCTGCTGCTGCTGCTGG 195
DB 1 CGCTGCTGCTGCTGCTGCTGG 21

```

```

RESULT 710
US-10-017-253A-105
Sequence 105, Application US/10017253A
Publication No. US20030166055A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Guiney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2830PIC62

```

```

; CURRENT APPLICATION NUMBER: US/10/017,253A
; CURRENT FILING DATE: 2001-12-13
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-017-253A-105

```

```

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1   CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 711
US-10-015-392A-105
; Sequence 105, Application US/10015392A
; Publication No. US20030166901A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C58
; CURRENT APPLICATION NUMBER: US/10/015,392A
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01

```

```

; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-392A-105

```

```

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1   CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 712
US-10-017-306A-105
; Sequence 105, Application US/10017306A
; Publication No. US20030170718A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C66
; CURRENT APPLICATION NUMBER: US/10/017,306A
; CURRENT FILING DATE: 2002-06-10
; Remaining Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-017-306A-105

```

```

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1   CGCTGCTGCTGCTGCTGCTG 21

```

RESULT 713  
US-10-017-867A-105  
Sequence 105, Application US/10017867A  
Publication No. US20030180792A1  
GENERAL INFORMATION:  
APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnovers, Luc  
APPLICANT: Eaton, Dan I.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, Christopher J.  
APPLICANT: Gurney, Austin L.  
APPLICANT: Hillen, Kenneth J.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
FILE REFERENCE: P2830P1C60  
CURRENT APPLICATION NUMBER: US/10/017,867A  
PRIOR FILING DATE: 2001-12-13  
PRIOR APPLICATION NUMBER: 60/098716  
PRIOR FILING DATE: 1998-09-01  
PRIOR APPLICATION NUMBER: 60/098723  
PRIOR FILING DATE: 1998-09-01  
PRIOR APPLICATION NUMBER: 60/098749  
PRIOR FILING DATE: 1998-09-01  
PRIOR APPLICATION NUMBER: 60/098750  
PRIOR FILING DATE: 1998-09-01  
PRIOR APPLICATION NUMBER: 60/098803  
PRIOR FILING DATE: 1998-09-02  
PRIOR APPLICATION NUMBER: 60/098821  
PRIOR FILING DATE: 1998-09-02  
PRIOR APPLICATION NUMBER: 60/098843  
PRIOR FILING DATE: 1998-09-02  
PRIOR APPLICATION NUMBER: 60/099536  
PRIOR FILING DATE: 1998-09-09  
PRIOR APPLICATION NUMBER: 60/099596  
PRIOR FILING DATE: 1998-09-09  
PRIOR APPLICATION NUMBER: 60/099598  
PRIOR FILING DATE: 1998-09-09  
PRIOR APPLICATION NUMBER: 60/099602  
PRIOR FILING DATE: 1998-09-09  
PRIOR APPLICATION NUMBER: 60/099642  
PRIOR FILING DATE: 1998-09-09  
PRIOR APPLICATION NUMBER: 60/099741  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099754  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099763  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099792  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099808  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099812  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099815  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/099816  
PRIOR FILING DATE: 1998-09-10  
PRIOR APPLICATION NUMBER: 60/100385  
PRIOR FILING DATE: 1998-09-15  
PRIOR APPLICATION NUMBER: 60/100388  
PRIOR FILING DATE: 1998-09-15  
PRIOR APPLICATION NUMBER: 60/100390  
PRIOR FILING DATE: 1998-09-15  
PRIOR APPLICATION NUMBER: 60/100584  
PRIOR FILING DATE: 1998-09-16

PRIOR APPLICATION NUMBER: 60/100627  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: 60/100661  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: 60/100662  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: 60/100664  
PRIOR FILING DATE: 1998-09-16  
PRIOR APPLICATION NUMBER: 60/100683  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/100684  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/100710  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/100711  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/100848  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/100849  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/100919  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/100930  
PRIOR FILING DATE: 1998-09-17  
PRIOR APPLICATION NUMBER: 60/101014  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101068  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101071  
PRIOR FILING DATE: 1998-09-18  
PRIOR APPLICATION NUMBER: 60/101279  
PRIOR FILING DATE: 1998-09-22  
PRIOR APPLICATION NUMBER: 60/101471  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101472  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101474  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101475  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101476  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101477  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101479  
PRIOR FILING DATE: 1998-09-23  
PRIOR APPLICATION NUMBER: 60/101738  
PRIOR FILING DATE: 1998-09-24  
PRIOR APPLICATION NUMBER: 60/101741  
PRIOR FILING DATE: 1998-09-24  
PRIOR APPLICATION NUMBER: 60/101743  
PRIOR FILING DATE: 1998-09-24  
PRIOR APPLICATION NUMBER: 60/101915  
PRIOR FILING DATE: 1998-09-24  
PRIOR APPLICATION NUMBER: 60/101916  
PRIOR FILING DATE: 1998-09-24  
PRIOR APPLICATION NUMBER: 60/102207  
PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102240  
PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102307  
PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102330  
PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102331  
PRIOR FILING DATE: 1998-09-29  
PRIOR APPLICATION NUMBER: 60/102484  
PRIOR FILING DATE: 1998-09-30  
PRIOR APPLICATION NUMBER: 60/102487  
PRIOR FILING DATE: 1998-09-30  
PRIOR APPLICATION NUMBER: 60/102570  
PRIOR FILING DATE: 1998-09-30  
PRIOR APPLICATION NUMBER: 60/102571

PRIOR FILING DATE:	1998-09-30
PRIOR APPLICATION NUMBER:	60/102684
PRIOR FILING DATE:	1998-10-01
PRIOR APPLICATION NUMBER:	60/102687
PRIOR FILING DATE:	1998-10-01
PRIOR APPLICATION NUMBER:	60/102965
PRIOR FILING DATE:	1998-10-02
PRIOR APPLICATION NUMBER:	60/103258
PRIOR FILING DATE:	1998-10-06
PRIOR APPLICATION NUMBER:	60/103314
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103315
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103328
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103395
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103396
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103401
PRIOR FILING DATE:	1998-10-07
PRIOR APPLICATION NUMBER:	60/103449
PRIOR FILING DATE:	1998-10-06
PRIOR APPLICATION NUMBER:	60/103633
PRIOR FILING DATE:	1998-10-08
PRIOR APPLICATION NUMBER:	60/103678
PRIOR FILING DATE:	1998-10-08
PRIOR APPLICATION NUMBER:	60/103679
PRIOR FILING DATE:	1998-10-08
PRIOR APPLICATION NUMBER:	60/103711
PRIOR FILING DATE:	1998-10-08
PRIOR APPLICATION NUMBER:	60/104257
PRIOR FILING DATE:	1998-10-14
PRIOR APPLICATION NUMBER:	60/104987
PRIOR FILING DATE:	1998-10-20
PRIOR APPLICATION NUMBER:	60/105000
PRIOR FILING DATE:	1998-10-20
PRIOR APPLICATION NUMBER:	60/105002
PRIOR FILING DATE:	1998-10-20
PRIOR APPLICATION NUMBER:	60/105104
PRIOR FILING DATE:	1998-10-21
PRIOR APPLICATION NUMBER:	60/105169
PRIOR FILING DATE:	1998-10-22
PRIOR APPLICATION NUMBER:	60/105266
PRIOR FILING DATE:	1998-10-22
PRIOR APPLICATION NUMBER:	60/105693
PRIOR FILING DATE:	1998-10-26
PRIOR APPLICATION NUMBER:	60/105694
PRIOR FILING DATE:	1998-10-26
PRIOR APPLICATION NUMBER:	60/105807
PRIOR FILING DATE:	1998-10-27
PRIOR APPLICATION NUMBER:	60/105881
PRIOR FILING DATE:	1998-10-27
PRIOR APPLICATION NUMBER:	60/105882
PRIOR FILING DATE:	1998-10-27
PRIOR APPLICATION NUMBER:	60/106023
PRIOR FILING DATE:	1998-10-28

```

Query March Similarity      0.1%   Score 17.8; DB 1; Length 21;
Best Local Similarity      90.5%;   Pred No. 3.3e+02;
Matches    19; Conservative    0; Mismatches    2; Indels    0; Gaps    0

Oy          175 CGCTGCTGCTGCTGCTGCTGG 195
              |||||
Db           1 CGCTGCTGTGTTGCTCCTCG 21

RESULT 714
US-10-012-064A-105
Sequence 105, Application US/10012064A
Publication No. US20030180836A1
GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
```

```

APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan I.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Pan, James
APPLICANT: Pao, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2810P1C19
CURRENT APPLICATION NUMBER: US/10/012,064A
CURRENT FILING DATE: 2002-07-15
PRIOR APPLICATION NUMBER: 60/098716
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098723
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098749
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098750
PRIOR FILING DATE: 1998-09-01
PRIOR APPLICATION NUMBER: 60/098803
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098821
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/098843
PRIOR FILING DATE: 1998-09-02
PRIOR APPLICATION NUMBER: 60/099536
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099596
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099598
PRIOR FILING DATE: 1998-09-09
PRIOR APPLICATION NUMBER: 60/099598
PRIOR FILING DATE: 1998-09-09
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-064A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

175 CGCTGCTGCTGCTGCTG 195
|||||
1 CGCTGCTGCTGCTGCTG 21

```

```

RESULT 715
US-10-013-909A-105
/ Sequence 105, Application US/10013909A
/ Publication No. US20030186318A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Bosteijn, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan I.
/ APPLICANT: *Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.

```



```

; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC35
; CURRENT FILING DATE: 2002-06-25
; PRIOR APPLICATION removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-909A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 716
US-10-015-671A-105
; Sequence 105, Application US/10015671A
; Publication No. US20030186319A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC47
; CURRENT APPLICATION NUMBER: US/10/015,671A
; CURRENT FILING DATE: 2001-12-11
; PRIOR APPLICATION removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-671A-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 717
US-10-015-610A-105
; Sequence 105, Application US/10015610A
```

```

; Publication No. US20030186361A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC52
; CURRENT APPLICATION NUMBER: US/10/015,610A
; CURRENT FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-610A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 718
US-10-012-137A-105
; Sequence 105, Application US/10012137A
; Publication No. US20030187189A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
```

```

; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC29
; CURRENT APPLICATION NUMBER: US/10/012,137A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-012-137A-105

```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 719
; US-10-012-752A-105
; Sequence 105, Application US/10012752A
; Publication No. US20030187190A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC24
; CURRENT APPLICATION NUMBER: US/10/012,752A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-012-752A-105

```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 720
; US-10-012-754A-105
; Sequence 105, Application US/10012754A
; Publication No. US20030187191A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC18
; CURRENT APPLICATION NUMBER: US/10/012,754A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-012-754A-105

```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 721
; US-10-013-910A-105
; Sequence 105, Application US/10013910A
; Publication No. US20030187192A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC33
; CURRENT APPLICATION NUMBER: US/10/013,910A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence

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/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-910A-105

Query Match          0 1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 722
US-10-013-911A-105
/ Sequence 105, Application US/10013911A
/ Publication No. US20030187193A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan I.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ FILE OF INVENTION: Acids Encoding the Same
/ FILE REFERENCE: P2830P1C39
/ CURRENT APPLICATION NUMBER: US/10/013.911A
/ CURRENT FILING DATE: 2001-12-10
/ PRIOR APPLICATION NUMBER: 60/098716
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098723
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098749
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098750
/ PRIOR FILING DATE: 1998-09-01
/ PRIOR APPLICATION NUMBER: 60/098803
/ PRIOR FILING DATE: 1998-09-02
/ PRIOR APPLICATION NUMBER: 60/098821
/ PRIOR FILING DATE: 1998-09-02
/ PRIOR APPLICATION NUMBER: 60/098843
/ PRIOR FILING DATE: 1998-09-02
/ PRIOR APPLICATION NUMBER: 60/099536
/ PRIOR FILING DATE: 1998-09-09
/ PRIOR APPLICATION NUMBER: 60/099596
/ PRIOR FILING DATE: 1998-09-09
/ PRIOR APPLICATION NUMBER: 60/099598
/ PRIOR FILING DATE: 1998-09-09
/ PRIOR APPLICATION NUMBER: 60/099602
/ PRIOR FILING DATE: 1998-09-09
/ PRIOR APPLICATION NUMBER: 60/099642
/ PRIOR FILING DATE: 1998-09-09
/ PRIOR APPLICATION NUMBER: 60/099741
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099754
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099763
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099792
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099808
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099812
/ PRIOR FILING DATE: 1998-09-10
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/ PRIOR APPLICATION NUMBER: 60/099815
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/099816
/ PRIOR FILING DATE: 1998-09-10
/ PRIOR APPLICATION NUMBER: 60/100385
/ PRIOR FILING DATE: 1998-09-15
/ PRIOR APPLICATION NUMBER: 60/100388
/ PRIOR FILING DATE: 1998-09-15
/ PRIOR APPLICATION NUMBER: 60/100390
/ PRIOR FILING DATE: 1998-09-15
/ PRIOR APPLICATION NUMBER: 60/100584
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: 60/100627
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: 60/100661
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: 60/100662
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: 60/100664
/ PRIOR FILING DATE: 1998-09-16
/ PRIOR APPLICATION NUMBER: 60/100683
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/100684
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/100710
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/100711
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/100848
/ PRIOR FILING DATE: 1998-09-18
/ PRIOR APPLICATION NUMBER: 60/100849
/ PRIOR FILING DATE: 1998-09-18
/ PRIOR APPLICATION NUMBER: 60/100919
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/100930
/ PRIOR FILING DATE: 1998-09-17
/ PRIOR APPLICATION NUMBER: 60/101014
/ PRIOR FILING DATE: 1998-09-18
/ PRIOR APPLICATION NUMBER: 60/101068
/ PRIOR FILING DATE: 1998-09-18
/ PRIOR APPLICATION NUMBER: 60/101071
/ PRIOR FILING DATE: 1998-09-18
/ PRIOR APPLICATION NUMBER: 60/101279
/ PRIOR FILING DATE: 1998-09-22
/ PRIOR APPLICATION NUMBER: 60/101471
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101472
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101474
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101475
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101476
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101477
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101479
/ PRIOR FILING DATE: 1998-09-23
/ PRIOR APPLICATION NUMBER: 60/101738
/ PRIOR FILING DATE: 1998-09-24
/ PRIOR APPLICATION NUMBER: 60/101741
/ PRIOR FILING DATE: 1998-09-24
/ PRIOR APPLICATION NUMBER: 60/101743
/ PRIOR FILING DATE: 1998-09-24
/ PRIOR APPLICATION NUMBER: 60/101915
/ PRIOR FILING DATE: 1998-09-24
/ PRIOR APPLICATION NUMBER: 60/101916
/ PRIOR FILING DATE: 1998-09-24
/ PRIOR APPLICATION NUMBER: 60/102207
/ PRIOR FILING DATE: 1998-09-29
/ PRIOR APPLICATION NUMBER: 60/102240
/ PRIOR FILING DATE: 1998-09-29
/ PRIOR APPLICATION NUMBER: 60/102307
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PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102330
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102331
PRIOR FILING DATE: 1998-09-29
PRIOR APPLICATION NUMBER: 60/102484
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102487
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102570
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102571
PRIOR FILING DATE: 1998-09-30
PRIOR APPLICATION NUMBER: 60/102684
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102687
PRIOR FILING DATE: 1998-10-01
PRIOR APPLICATION NUMBER: 60/102965
PRIOR FILING DATE: 1998-10-02
PRIOR APPLICATION NUMBER: 60/103258
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103314
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103315
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103328
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103395
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103396
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103401
PRIOR FILING DATE: 1998-10-07
PRIOR APPLICATION NUMBER: 60/103449
PRIOR FILING DATE: 1998-10-06
PRIOR APPLICATION NUMBER: 60/103633
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103678
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103679
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/103711
PRIOR FILING DATE: 1998-10-08
PRIOR APPLICATION NUMBER: 60/104257
PRIOR FILING DATE: 1998-10-14
PRIOR APPLICATION NUMBER: 60/104987
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105000
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105002
PRIOR FILING DATE: 1998-10-20
PRIOR APPLICATION NUMBER: 60/105104
PRIOR FILING DATE: 1998-10-21
PRIOR APPLICATION NUMBER: 60/105169
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105266
PRIOR FILING DATE: 1998-10-22
PRIOR APPLICATION NUMBER: 60/105693
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105694
PRIOR FILING DATE: 1998-10-26
PRIOR APPLICATION NUMBER: 60/105807
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105881
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/105882
PRIOR FILING DATE: 1998-10-27
PRIOR APPLICATION NUMBER: 60/106023
PRIOR FILING DATE: 1998-10-28

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Query Match 0.1%; Score 17.8; DB 1; Length 21;  
 Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 175 CGCTGCTGCTGCTGCTGCTG 195
DB 1 CGCTGCTGCTGCTGCTGCTG 21

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RESULT 723
US-10-013-912A-105
; Sequence 105, Application US/10013912A
; Publication No. US20030187194A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Pan, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PLC32
; CURRENT APPLICATION NUMBER: US/10/013, 912A
; CURRENT FILING DATE: 2001-12-10
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-013-912A-105

```

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QY 175 CGCTGCTGCTGCTGCTGCTG 195
DB 1 CGCTGCTGCTGCTGCTGCTG 21
Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

RESULT 724
US-10-015-653A-105
; Sequence 105, Application US/10015653A
; Publication No. US20030187195A1

```

```
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ TITLE OF INVENTION: Acids Encoding the Same
/ FILE REFERENCE: P2830P1C43
/ CURRENT APPLICATION NUMBER: US/10/015,653A
/ CURRENT FILING DATE: 2002-06-25
/ Prior Application removed - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 477
/ SEQ ID NO 105
/ LENGTH: 21
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-653A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 725
US-10-012-101B-105
/ Sequence 105, Application US/10012101B
/ Publication No. US20030187239A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ TITLE OF INVENTION: Acids Encoding the Same
/ FILE REFERENCE: P2830P1C6
/ CURRENT APPLICATION NUMBER: US/10/012,101B
/ CURRENT FILING DATE: 2001-12-06
/ Prior application removed - See file Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 477
/ SEQ ID NO 105
/ LENGTH: 21
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-101B-105
```

```
Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 726
US-10-015-480A-105
/ Sequence 105, Application US/10015480A
/ Publication No. US20030190667A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ TITLE OF INVENTION: Acids Encoding the Same
/ FILE REFERENCE: P2830P1C50
/ CURRENT APPLICATION NUMBER: US/10/015,480A
/ CURRENT FILING DATE: 2002-06-25
/ Prior Application removed - See File Wrapper or Palm
/ NUMBER OF SEQ ID NOS: 477
/ SEQ ID NO 105
/ LENGTH: 21
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-480A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 727
US-10-015-715A-105
/ Sequence 105, Application US/10015715A
/ Publication No. US20030190668A1
/ GENERAL INFORMATION:
/ APPLICANT: Baker, Kevin P.
/ APPLICANT: Botstein, David
/ APPLICANT: Desnoyers, Luc
/ APPLICANT: Eaton, Dan L.
/ APPLICANT: Ferrara, Napoleone
/ APPLICANT: Fong, Sherman
/ APPLICANT: Gao, Wei-Qiang
/ APPLICANT: Goddard, Audrey
/ APPLICANT: Godowski, Paul J.
/ APPLICANT: Grimaldi, Christopher J.
/ APPLICANT: Gurney, Austin L.
/ APPLICANT: Hillan, Kenneth J.
/ APPLICANT: Pan, James
/ APPLICANT: Paoni, Nicholas F.
/ TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
/ TITLE OF INVENTION: Acids Encoding the Same
```

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FILE REFERENCE: P2830P1C36
CURRENT APPLICATION NUMBER: US/10/015,715A
CURRENT FILING DATE: 2002-06-25
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-715A-105

Query Match
Best Local Similarity 90.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 728
US-10-012-237A-105
Sequence 105, Application US/10012237A
Publication No. US20030191281A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C21
CURRENT APPLICATION NUMBER: US/10/012,237A
CURRENT FILING DATE: 2002-06-10
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-237A-105

Query Match
Best Local Similarity 90.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 729
US-10-013-906A-105
Sequence 105, Application US/10013906A
Publication No. US20030191282A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
```

```
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, Audrey
APPLICANT: Grimaldi, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Paoni, Nicholas F.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2830P1C36
CURRENT APPLICATION NUMBER: US/10/013,906A
CURRENT FILING DATE: 2002-06-10
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 477
SEQ ID NO 105
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-013-906A-105

Query Match
Best Local Similarity 90.1%; Score 17.8; DB 1; Length 21;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195
Db 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 730
US-10-013-906A-105
Sequence 105, Application US/10013906A
Publication No. US20030191282A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
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; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100684
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100710
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100711
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100848
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/100849
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/100919
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/100930
; PRIOR FILING DATE: 1998-09-17
; PRIOR APPLICATION NUMBER: 60/101014
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/101068
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/101071
; PRIOR FILING DATE: 1998-09-18
; PRIOR APPLICATION NUMBER: 60/101279
; PRIOR FILING DATE: 1998-09-22
; PRIOR APPLICATION NUMBER: 60/101471
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101472
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101474
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101475
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101476
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101477
; PRIOR FILING DATE: 1998-09-23
; PRIOR APPLICATION NUMBER: 60/101479
; PRIOR FILING DATE: 1998-09-23
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; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/101743
; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/101915
; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/101916
; PRIOR FILING DATE: 1998-09-24
; PRIOR APPLICATION NUMBER: 60/102207
; PRIOR FILING DATE: 1998-09-29
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; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102307
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102330
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102331
; PRIOR FILING DATE: 1998-09-29
; PRIOR APPLICATION NUMBER: 60/102484
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102487
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102570
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102571
; PRIOR FILING DATE: 1998-09-30
; PRIOR APPLICATION NUMBER: 60/102684
; PRIOR FILING DATE: 1998-10-01
; PRIOR APPLICATION NUMBER: 60/102687
; PRIOR FILING DATE: 1998-10-01
; PRIOR APPLICATION NUMBER: 60/102965
; PRIOR FILING DATE: 1998-10-02
; PRIOR APPLICATION NUMBER: 60/103258
; PRIOR FILING DATE: 1998-10-06

```

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; PRIOR APPLICATION NUMBER: 60/103314
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103315
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103328
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103395
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103396
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103401
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 60/103449
; PRIOR FILING DATE: 1998-10-06
; PRIOR APPLICATION NUMBER: 60/103633
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103678
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103679
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/103711
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/104257
; PRIOR FILING DATE: 1998-10-14
; PRIOR APPLICATION NUMBER: 60/104987
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105000
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105002
; PRIOR FILING DATE: 1998-10-20
; PRIOR APPLICATION NUMBER: 60/105104
; PRIOR FILING DATE: 1998-10-21
; PRIOR APPLICATION NUMBER: 60/105169
; PRIOR FILING DATE: 1998-10-22
; PRIOR APPLICATION NUMBER: 60/105266
; PRIOR FILING DATE: 1998-10-22
; PRIOR APPLICATION NUMBER: 60/105693
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105694
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105807
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105881
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105882
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/106023
; PRIOR FILING DATE: 1998-10-28

```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db       1 CGCTGCTGCTGCTGCTGCTG 21

```

```

RESULT 730
US-10-015-388A-105
; Sequence 105, Application US/10015388A
; Publication No. US20030191299A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.

```

```

; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C44
; CURRENT FILING DATE: 2002-07-15
; CURRENT APPLICATION NUMBER: US/10/015,388A
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-388A-105
```

```

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 175 CGCTGCTGCTGCTGCTGCTGG 195
Db 1 CGCTGCTGCTGCTGCTGCTCTGG 21
```

```

RESULT 731
US-10-012-753A-105
; Publication 105, Application US/10012753A
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan 1.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C17
; CURRENT APPLICATION NUMBER: US/10/012,753A
; CURRENT FILING DATE: 2001-12-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-753A-105
```

```

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 175 CGCTGCTGCTGCTGCTGCTGG 195
Db 1 CGCTGCTGCTGCTGCTGCTCTGG 21
```

```

RESULT 732
US-10-015-385A-105
```

```

; Sequence 105, Application US/10015385A
; Publication No. US20030195347A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan 1.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C51
; CURRENT APPLICATION NUMBER: US/10/015,385A
; CURRENT FILING DATE: 2002-07-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-385A-105
```

```

Query Match 0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy 175 CGCTGCTGCTGCTGCTGCTGG 195
Db 1 CGCTGCTGCTGCTGCTGCTCTGG 21
```

```

RESULT 733
US-10-007-236A-105
; Publication 105, Application US/10007236A
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan 1.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C12
; CURRENT APPLICATION NUMBER: US/10/007,236A
; CURRENT FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
```



US-10-007-236A-105

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
DB 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 734

US-10-015-389A-105  
Sequence 105, Application US/10015389A  
Publication No. US20030199675A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnovers, Luc  
APPLICANT: Eaton, Dan I.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, Christopher J.  
APPLICANT: Gurney, Austin L.  
APPLICANT: Hillan, Kenneth J.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2830PIC48  
CURRENT APPLICATION NUMBER: US/10/015.389A  
CURRENT FILING DATE: 2002-06-25  
Prior Application removed - See File Wrapper or Palm  
NUMBER OF SEQ ID NOS: 477  
SEQ ID NO 105  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide probe  
US-10-015-389A-105

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
DB 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 735

US-10-015-519A-105  
Sequence 105, Application US/10015519A  
Publication No. US20030203401A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnovers, Luc  
APPLICANT: Eaton, Dan I.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, Christopher J.  
APPLICANT: Gurney, Austin L.  
APPLICANT: Hillan, Kenneth J.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

FILE REFERENCE: P2830PIC49

CURRENT APPLICATION NUMBER: US/10/015.519A

CURRENT FILING DATE: 2002-06-25

Prior Application removed - See File Wrapper or Palm

NUMBER OF SEQ ID NOS: 477

SEQ ID NO 105

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide probe

US-10-015-519A-105

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
DB 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 736

US-10-013-915A-105  
Sequence 105, Application US/10013915A  
Publication No. US20030204053A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.  
APPLICANT: Botstein, David  
APPLICANT: Desnovers, Luc  
APPLICANT: Eaton, Dan I.  
APPLICANT: Ferrara, Napoleone  
APPLICANT: Fong, Sherman  
APPLICANT: Gao, Wei-Qiang  
APPLICANT: Goddard, Audrey  
APPLICANT: Godowski, Paul J.  
APPLICANT: Grimaldi, Christopher J.  
APPLICANT: Gurney, Austin L.  
APPLICANT: Hillan, Kenneth J.  
APPLICANT: Pan, James  
APPLICANT: Paoni, Nicholas F.  
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic  
TITLE OF INVENTION: Acids Encoding the Same  
FILE REFERENCE: P2830PIC37  
CURRENT APPLICATION NUMBER: US/10/013.915A  
CURRENT FILING DATE: 2002-06-25  
Prior Application removed - See File Wrapper or Palm  
NUMBER OF SEQ ID NOS: 477  
SEQ ID NO 105  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide probe  
US-10-013-915A-105

Query Match 0.1%; Score 17.8; DB 1; Length 21;  
Best Local Similarity 90.5%; Pred. No. 3.3e+02;  
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCTG 195  
DB 1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 737

US-10-015-394A-105  
Sequence 105, Application US/10015394A  
Publication No. US20030204054A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

```

; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC41
; CURRENT APPLICATION NUMBER: US/10/015,394A
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-015-394A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 738
US-10-015-390A-105
; Sequence 105, Application US/10015390A
; Publication No. US20030216562A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
```

```

; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC53
; CURRENT APPLICATION NUMBER: US/10/015,390A
; PRIOR FILING DATE: 2002-07-15
; Remaining Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
; US-10-015-390A-105

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 739
US-10-006-746A-105
; Sequence 105, Application US/10006746A
; Publication No. US20030220471A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC5
; CURRENT APPLICATION NUMBER: US/10/006,746A
; PRIOR FILING DATE: 2001-12-06
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099602
; PRIOR FILING DATE: 1998-09-09
```



```

; PRIOR APPLICATION NUMBER: 60/105694
; PRIOR FILING DATE: 1998-10-26
; PRIOR APPLICATION NUMBER: 60/105807
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105881
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/105882
; PRIOR FILING DATE: 1998-10-27
; PRIOR APPLICATION NUMBER: 60/106023
; PRIOR FILING DATE: 1998-10-28

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 740
US-10-226-254A-105
; Sequence 105, Application US/10226254A
; Publication No. US20030224478A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC68
; CURRENT APPLICATION NUMBER: US/10/226,254A
; CURRENT FILING DATE: 2002-08-21
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099598
; PRIOR FILING DATE: 1998-09-09
; Remaining prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-226-254A-105
```

```

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 741
US-10-011-795A-105
; Sequence 105, Application US/10011795A
; Publication No. US20040005626A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC25
; CURRENT APPLICATION NUMBER: US/10/011,795A
; CURRENT FILING DATE: 2001-12-07
; Prior application removed - See file wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-011-795A-105

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      175 CGCTGCTGCTGCTGCTGCTG 195
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 742
US-10-012-231A-105
; Sequence 105, Application US/10012231A
; Publication No. US20040014130A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan I.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Grimaldi, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

```

; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2830PIC23
; CURRENT APPLICATION NUMBER: US/10/012,231A
; PRIOR FILING DATE: 2002-06-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-231A-105
```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 743
US-10-015-395A-105
; Sequence 105, Application US/10015395A
; Publication No. US20040073015A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Deenoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC57
; CURRENT APPLICATION NUMBER: US/10/015,395A
; PRIOR FILING DATE: 2001-12-12
; Prior Application removed - See file wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-015-395A-105
```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 744
US-10-012-149A-105
; Sequence 105, Application US/10012149A
; Publication No. US20050043520A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
```

```

; APPLICANT: Deenoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830PIC26
; CURRENT APPLICATION NUMBER: US/10/012,149A
; PRIOR FILING DATE: 2002-06-25
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide probe
US-10-012-149A-105
```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      175 CGCTGCTGCTGCTGCTGCTGG 195
Db      1 CGCTGCTGCTGCTGCTGCTGG 21
```

```

RESULT 745
US-10-951-163-16/c
; Sequence 16, Application US/10951163
; Publication No. US20050158737A1
; GENERAL INFORMATION:
; APPLICANT: Banham, Allison
; APPLICANT: Pullford, Karen
; APPLICANT: Liggins, Amanda
; APPLICANT: Guinn, Barbara
; TITLE OF INVENTION: TUMOUR ASSOCIATED ANTIGENS
; FILE REFERENCE: BMT-009US
; CURRENT APPLICATION NUMBER: US/10/951,163
; PRIOR FILING DATE: 2004-09-27
; PRIOR APPLICATION NUMBER: PCT/GB03/01378
; PRIOR FILING DATE: 2003-03-27
; PRIOR APPLICATION NUMBER: 0207251.0
; PRIOR FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 83
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 16
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Primer
US-10-951-163-16
```

```

Query Match          0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      4959 TTCTTACGCTGCTGCTTTCGGA 4979
Db      21 TTGTTACGCTGCTGCTTCGGA 1
```

RESULT 746

```
US-11-025-607-105
; Sequence 105, Application US/11025607
; Publication No. US20050181478A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K.
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2830P1C1
; CURRENT APPLICATION NUMBER: US/11/025,607
; CURRENT FILING DATE: 2004-12-28
; PRIOR APPLICATION NUMBER: US/09/946,374
; PRIOR FILING DATE: 2001-09-04
; PRIOR APPLICATION NUMBER: 60/098716
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098723
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098749
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098750
; PRIOR FILING DATE: 1998-09-01
; PRIOR APPLICATION NUMBER: 60/098803
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098821
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/098843
; PRIOR FILING DATE: 1998-09-02
; PRIOR APPLICATION NUMBER: 60/099536
; PRIOR FILING DATE: 1998-09-09
; PRIOR APPLICATION NUMBER: 60/099596
; PRIOR FILING DATE: 1998-09-09
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 477
; SEQ ID NO 105
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: Artificial Sequence
; LOCATION: 1-21
; OTHER INFORMATION: Synthetic construct
US-11-025-607-105

Query Match      0.1%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      175 CGCTGCTGCTGCTGCTGCTG 195
      |||||
Db      1 CGCTGCTGCTGCTGCTGCTG 21

RESULT 747
US-10-922-544-29/c
```

```
; Sequence 29, Application US/10922544
; Publication No. US20050153915A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Usman, Nassim
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response
; FILE REFERENCE: 400/204 (MBH803-939-B)
; CURRENT APPLICATION NUMBER: US/10/922,544
; CURRENT FILING DATE: 2004-08-19
; PRIOR APPLICATION NUMBER: US 60/512,701
; PRIOR FILING DATE: 2003-10-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re
US-10-922-544-29

Query Match      0.1%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 3.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      176 GCTGCTGCTGCTGCTGCTG 194
      |||||
Db      19 GCTGCTGCTGCTGCTGCTG 1

RESULT 748
US-10-922-544-203
; Sequence 203, Application US/10922544
; Publication No. US20050153915A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Usman, Nassim
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response
; FILE REFERENCE: 400/204 (MBH803-939-B)
; CURRENT APPLICATION NUMBER: US/10/922,544
; CURRENT FILING DATE: 2004-08-19
; PRIOR APPLICATION NUMBER: US 60/512,701
; PRIOR FILING DATE: 2003-10-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
```

```

; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 203
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: sRNA antisense region
US-10-922-544-203
```

```

Query Match
Best Local Similarity 0.1%; Score 17.4; DB 1; Length 19;
Matches 12; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 176 GCTGCTGCTGCTGCTGCTG 194
Db 1 GGUGCUCGUCGUCGUCG 19
```

```

RESULT 749
US-10-032-585-5708
; Sequence 5708, Application US/10032585
; Publication No. US20030180953A1
; GENERAL INFORMATION:
; APPLICANT: Terry, Roemer D.
; APPLICANT: Bo, Jiang
; APPLICANT: Charles, Boone
; APPLICANT: Howard, Bussey
; TITLE OF INVENTION: Gene Disruption Methodologies for Drug Target Discovery
; FILE REFERENCE: 10182-005-999
; CURRENT APPLICATION NUMBER: US/10/032,585
; CURRENT FILING DATE: 2001-12-20
; NUMBER OF SEQ ID NOS: 8000
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5708
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Candida albicans
US-10-032-585-5708
```

```

Query Match
Best Local Similarity 0.1%; Score 17.4; DB 1; Length 20;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 176 GCTGCTGCTGCTGCTGCTG 194
Db 1 GCTGCTGCTGCTGCTGCTG 19
```

```

RESULT 750
US-10-315-962-46/c
; Sequence 46, Application US/10315962
; Publication No. US20040109848A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Nicholas M. Dean
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth W. Doble
; TITLE OF INVENTION: MODULATION OF AP-2 ALPHA EXPRESSION
; FILE REFERENCE: Pts-0046
; CURRENT APPLICATION NUMBER: US/10/315,962
```

```

; CURRENT FILING DATE: 2000-12-09
; NUMBER OF SEQ ID NOS: 126
; SEQ ID NO 46
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-315-962-46
```

```

Query Match
Best Local Similarity 0.1%; Score 17.4; DB 1; Length 20;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 176 GCTGCTGCTGCTGCTGCTG 194
Db 20 GCTAGCTGCTGCTGCTGCTG 2
```

```

RESULT 751
US-10-215-432-37/c
; Sequence 37, Application US/10215432
; Publication No. US20030109476A1
; GENERAL INFORMATION:
; APPLICANT: Eric B. Kmiec
; APPLICANT: Hetal Parekh-Olmedo
; TITLE OF INVENTION: Composition and methods for the
; TITLE OF INVENTION: prevention and treatment of Huntington's disease
; FILE REFERENCE: Napro-10
; CURRENT APPLICATION NUMBER: US/10/215,432
; CURRENT FILING DATE: 2002-11-19
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 37
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Isolated clone of gene-alteration directed by a
US-10-215-432-37
```

```

Query Match
Best Local Similarity 0.1%; Score 17.4; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 176 GCTGCTGCTGCTGCTGCTG 194
Db 19 GCTGCTGCTGCTGCTGCTG 1
```

```

RESULT 752
US-10-215-432-44/c
; Sequence 44, Application US/10215432
; Publication No. US20030109476A1
; GENERAL INFORMATION:
; APPLICANT: Eric B. Kmiec
; APPLICANT: Hetal Parekh-Olmedo
; TITLE OF INVENTION: Composition and methods for the
; TITLE OF INVENTION: prevention and treatment of Huntington's disease
; FILE REFERENCE: Napro-10
; CURRENT APPLICATION NUMBER: US/10/215,432
; CURRENT FILING DATE: 2002-11-19
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 44
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Converted HD sequence
US-10-215-432-44
```

Query Match 0.1%; Score 17.4; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. 3.7e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 194  
DB 19 GCTGCTGCTGCTGCTG 1

## RESULT 753

US-10-418-182-96  
; Sequence 96, Application US/10418182  
; Publication No. US20030228302A1  
; GENERAL INFORMATION:  
; APPLICANT: Crea, Roberto  
; TITLE OF INVENTION: UNIVERSAL LIBRARIES FOR IMMUNOGLOBULINS  
; FILE REFERENCE: 1551.2001-001  
; CURRENT APPLICATION NUMBER: US/10/418,182  
; CURRENT FILING DATE: 2003-04-16  
; PRIOR APPLICATION NUMBER: 60/373,558  
; PRIOR FILING DATE: 2002-04-17  
; NUMBER OF SEQ ID NOS: 423  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 96  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-418-182-96

Query Match 0.1%; Score 17.4; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. 3.7e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 194  
DB 1 GCTGCTGCTGCTGCTG 19

## RESULT 754

US-10-751-736-44163/c  
; Sequence 44163, Application US/10751736  
; Publication No. US20040265230A1  
; GENERAL INFORMATION:  
; APPLICANT: Wyeth  
; APPLICANT: Martinez, Robert  
; APPLICANT: Brown, Eugene  
; APPLICANT: Liu, Wei  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
; FILE REFERENCE: AM100927 (031896-002000)  
; CURRENT APPLICATION NUMBER: US/10/751,736  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
; PRIOR FILING DATE: 2003-01-06  
; NUMBER OF SEQ ID NOS: 54873  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 44163  
; LENGTH: 21  
; TYPE: RNA  
; ORGANISM: RNAi  
US-10-751-736-44163

Query Match 0.1%; Score 17.4; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. 3.7e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 996 GACACACCAAGATCAACA 1014  
DB 21 GACACACCAAGATCAACA 3

RESULT 755  
US-10-751-736-44166/c  
; Sequence 44166, Application US/10751736  
; Publication No. US20040265230A1  
; GENERAL INFORMATION:  
; APPLICANT: Wyeth  
; APPLICANT: Martinez, Robert  
; APPLICANT: Brown, Eugene  
; APPLICANT: Liu, Wei  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
; FILE REFERENCE: AM100927 (031896-002000)  
; CURRENT APPLICATION NUMBER: US/10/751,736  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
; PRIOR FILING DATE: 2003-01-06  
; NUMBER OF SEQ ID NOS: 54873  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 44166  
; LENGTH: 21  
; TYPE: RNA  
; ORGANISM: RNAi  
US-10-751-736-44166

Query Match 0.1%; Score 17.4; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. 3.7e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 996 GACACACCAAGATCAACA 1014  
DB 20 GACACACCAAGATCAACA 2

RESULT 756  
US-09-888-615-120  
; Sequence 120, Application US/09888615  
; Patent No. US20020064856A1  
; GENERAL INFORMATION:  
; APPLICANT: PLOMMAN, GREGORY  
; APPLICANT: WHITE, DAVID  
; APPLICANT: CAENEPEEL, SEAN  
; APPLICANT: CHARIDCZAK, GLEN  
; APPLICANT: MANNING, GERARD  
; APPLICANT: SUDARSANAM, SUCHA  
; TITLE OF INVENTION: NOVEL PROTEASES  
; FILE REFERENCE: 038602/1214  
; CURRENT APPLICATION NUMBER: US/09/888,615  
; CURRENT FILING DATE: 2001-06-26  
; PRIOR APPLICATION NUMBER: 60/214,047  
; PRIOR FILING DATE: 2000-06-26  
; NUMBER OF SEQ ID NOS: 150  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 120  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-888-615-120

Query Match 0.1%; Score 17.4; DB 1; Length 22;  
Best Local Similarity 94.7%; Pred. No. 3.9e+02;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 194  
DB 1 GCTGCTGCTGCTGCTG 19

RESULT 757  
US-10-321-039-541/c  
; Sequence 541, Application US/10321039  
; Publication No. US20040014067A1  
; GENERAL INFORMATION:  
; APPLICANT: Lyamichev, Victor



```
APPLICANT: Lukowiak, Andrew
APPLICANT: Jareys, Nancy
APPLICANT: Kurensky, David
TITLE OF INVENTION: Amplification Methods and Compositions
FILE REFERENCE: FORS-06960
CURRENT APPLICATION NUMBER: US/10/321,039
PRIORITY FILING DATE: 2002-12-17
PRIOR APPLICATION NUMBER: 09/998,157
PRIOR FILING DATE: 2001-11-30
PRIOR APPLICATION NUMBER: 60/329,113
PRIOR FILING DATE: 2001-10-12
PRIOR APPLICATION NUMBER: 60/360,489
PRIOR FILING DATE: 2001-10-19
NUMBER OF SEQ ID NOS: 759
SOFTWARE: PatentIn version 3.2
SEQ ID NO 541
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic
US-10-321-039-541
```

```
Query Match          0.1%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 3.3e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      178 TGCTGCTGCTGCTGCTG 194
Db      18 TGCTGCTGCTGCTGCTG 2
```

```
RESULT 758
US-09-899-440-3/c
Sequence 3, Application US/09899440
Publication No. US20030092158A1
GENERAL INFORMATION:
APPLICANT: Stein, Cy
TITLE OF INVENTION: PHOSPHOROTHIOMATE ANTISENSE HEPARANASE OLIGONUCLEOTIDES
FILE REFERENCE: 0575/63180
CURRENT APPLICATION NUMBER: US/09/899,440
CURRENT FILING DATE: 2001-07-05
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn version 3.0
SEQ ID NO 3
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
LOCATION: ( )
OTHER INFORMATION: antisense oligonucleotide LB65
US-09-899-440-3
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      178 TGCTGCTGCTGCTGCTGCG 197
Db      20 TGCTGCTGCTGCTGCTGCGG 1
```

```
RESULT 759
US-10-712-795-459/c
Sequence 459, Application US/10712795
Publication No. US20040214325A1
GENERAL INFORMATION:
APPLICANT: Crooke et al.
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: 30566/39662
CURRENT APPLICATION NUMBER: US/10/712,795
CURRENT FILING DATE: 2003-11-13
```

```
PRIOR APPLICATION NUMBER: US 60/426,234
PRIOR FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: PCT/US03/15493
PRIOR FILING DATE: 2003-05-13
NUMBER OF SEQ ID NOS: 892
SEQ ID NO 459
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-459
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3118 GGGACACCGAGATTGAGCTG 3137
Db      20 GGGACACCGAGTTAGAGATG 1
```

```
RESULT 760
US-10-712-795-820/c
Sequence 820, Application US/10712795
Publication No. US20040214325A1
GENERAL INFORMATION:
APPLICANT: Crooke et al.
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: 30566/39662
CURRENT APPLICATION NUMBER: US/10/712,795
CURRENT FILING DATE: 2003-11-13
PRIOR APPLICATION NUMBER: US 60/426,234
PRIOR FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: PCT/US03/15493
PRIOR FILING DATE: 2003-05-13
NUMBER OF SEQ ID NOS: 892
SEQ ID NO 820
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-820
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      4940 TGATTACGAGTCATTGAGGT 4959
Db      20 TGATTACAGTCACGTGAGGT 1
```

```
RESULT 761
US-10-712-795-865/c
Sequence 865, Application US/10712795
Publication No. US20040214325A1
GENERAL INFORMATION:
APPLICANT: Crooke et al.
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
FILE REFERENCE: 30566/39662
CURRENT APPLICATION NUMBER: US/10/712,795
CURRENT FILING DATE: 2003-11-13
PRIOR APPLICATION NUMBER: 60/426,234
PRIOR FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: PCT/US03/15493
PRIOR FILING DATE: 2003-05-13
NUMBER OF SEQ ID NOS: 892
SEQ ID NO 865
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
```

FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-865

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 4.1e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
DB 20 GGTGCGAATTAAGACTGAGGC 1

RESULT 762  
US-10-712-795-891/c  
Sequence 891, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 891  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-891

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 4.1e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
DB 20 GGTGCGAATTAAGACTGAGGC 1

RESULT 763  
US-10-920-612-459/c  
Sequence 459, Application US/10920612  
Publication No. US20050009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 459  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-459

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 4.1e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3118 GGGACACCAATTAGAGCTG 3137  
DB 20 GGGACACCAAGTTAGAGATG 1

RESULT 764  
US-10-920-612-820/c  
Sequence 820, Application US/10920612  
Publication No. US20050009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 820  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-820

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 4.1e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4940 TGATTACGAGTCATTGAGCT 4959  
DB 20 TGATTACAGTCACCTGAGCT 1

RESULT 765  
US-10-920-612-865/c  
Sequence 865, Application US/10920612  
Publication No. US20050009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 865  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-865

Query Match 0.1%; Score 16.8; DB 1; Length 20;  
Best Local Similarity 90.0%; Pred. No. 4.1e+02;  
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGACTGAGGC 3268  
DB 20 GGTGCGAATTAAGACTGAGGC 1

```
RESULT 766
US-10-920-612-891/c
; Sequence 891, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 891
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-891
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      3249 GGTGCGAAGCAGACTGAGGC 3268
Db      20  GGTGTAAGCAGACTGAGGC 1
```

```
RESULT 767
US-10-483-009A-3/c
; Sequence 3, Application US/10483009A
; Publication No. US20050065103A1
; GENERAL INFORMATION:
; APPLICANT: THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
; TITLE OF INVENTION: PHOSPHOTHIOLATE ANTISENSE HEPARANASE OLIGONUCLEOTIDES
; FILE REFERENCE: 0575/63180-A-PCT
; CURRENT APPLICATION NUMBER: US/10/483,009A
; PRIOR FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US 10/483,009
; PRIOR FILING DATE: 2004-01-05
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1..1)
; OTHER INFORMATION: antisense oligonucleotide LB65 directed to human heparanase
US-10-483-009A-3
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 4.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      178 TGCTGCTGCTGCTGCTGCGC 197
Db      20  TGCTGCTGCTGCTGCTGCGG 1
```

```
RESULT 768
US-10-349-143-7896
; Sequence 7896, Application US/10349143
; Publication No. US20040005584A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Cohen, Daniel
; APPLICANT: Blumenfeld, Marta
; APPLICANT: Chumakov, Ilya
; TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
; FILE REFERENCE: GENSERT 0200C1
; CURRENT APPLICATION NUMBER: US/10/349,143
; PRIOR FILING DATE: 2003-01-21
; PRIOR APPLICATION NUMBER: US/09/422,978
; PRIOR FILING DATE: 1999-10-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/109,732
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/082,614
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 11796
; SEQ ID NO 7896
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..21
; OTHER INFORMATION: downstream amplification primer 99-12535 for SEQ 31, in complement
US-10-349-143-7896
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      4572 AAAGAATCAAGATGTGATG 4591
Db      2  ACAGAAATCAAGAGTGATGG 21
```

```
RESULT 769
US-10-751-736-17715/c
; Sequence 17715, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 17715
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi
; OTHER INFORMATION:
US-10-751-736-17715
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
OY      3556 CTGCCAAACTGCTCTCCAA 3575
Db      20  CTGCCAAACTCTTCTCTAA 1
```

```
RESULT 770
US-10-751-736-18339/c
; Sequence 18339, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 18339
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-18339
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3556 CTGCCAAACTGCTTCTCAA 3575
Db      20 CTGCCAAACTGCTTCTCTAA 1
```

```
RESULT 771
US-10-847-918-7897
; Sequence 7897, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7897
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-847-918-7897
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3640 AAGAGAAGATTGAATTGAA 3659
Db      2 AAGAGAAGACTGAAGTTGAA 21
```

```
RESULT 772
US-10-847-918-7898
; Sequence 7898, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
```

```
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7898
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi-sense strand
US-10-847-918-7898
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 70.0%; Pred. No. 4.4e+02;
Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3641 AAGAGAAGATTGAATTGAA 3660
Db      1 AAGAGAAGACUGAAGUGCAAU 20
```

```
RESULT 773
US-10-847-918-7899/c
; Sequence 7899, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7899
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi-antisense strand
US-10-847-918-7899
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3640 AAGAGAAGATTGAATTGAA 3659
Db      20 AAGAGAAGACTGAAGTTGAA 1
```

```
RESULT 774
US-10-847-918-7900
; Sequence 7900, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7900
```

```
/ LENGTH: 21
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-847-918-7900
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3640 AAGAGAGAGTGAATTGAA 3659
Db      1 AAGAGAGAGCTGAGATTGAA 20
```

```
RESULT 775
```

```
US-10-847-918-7902/C
/ Sequence 7902, Application US/10847918
/ Publication No. US20050119210A1
/ GENERAL INFORMATION:
/ APPLICANT: Wyeth
/ APPLICANT: Be, Xiaobing
/ APPLICANT: Liu, Wei
/ APPLICANT: Slonim, Donna
/ APPLICANT: Howes, Steve
/ TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
/ FILE REFERENCE: 031896-026000 (AM101264)
/ CURRENT APPLICATION NUMBER: US/10/847,918
/ CURRENT FILING DATE: 2004-05-19
/ PRIOR APPLICATION NUMBER: US 60/471,729
/ PRIOR FILING DATE: 2003-05-20
/ NUMBER OF SEQ ID NOS: 14937
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 7902
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: RNAi-antisense strand
US-10-847-918-7902
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3640 AAGAGAGAGTGAATTGAA 3659
Db      21 AAGAGAGAGCTGAGATTGAA 2
```

```
RESULT 776
```

```
US-10-285-976-142/C
/ Sequence 142, Application US/10285976
/ Publication No. US20030165500A1
/ GENERAL INFORMATION:
/ APPLICANT: Rhee, Chae-Seo
/ APPLICANT: Malini, Sen
/ APPLICANT: Wu, Christina
/ APPLICANT: Leon, Lorenzo M.
/ APPLICANT: Corr, Marjaret
/ APPLICANT: Carson, Dennis A.
/ TITLE OF INVENTION: The Regents of the University of California
/ TITLE OF INVENTION: Wnt and Fizzled Receptors as Targets for Immunotherapy
/ FILE REFERENCE: 023070-130320US
/ CURRENT APPLICATION NUMBER: US/10/285,976
/ CURRENT FILING DATE: 2002-11-01
/ PRIOR APPLICATION NUMBER: US 60/287,995
/ PRIOR FILING DATE: 2001-05-01
/ PRIOR APPLICATION NUMBER: WO PCT/US02/13802
/ PRIOR FILING DATE: 2002-05-01
/ NUMBER OF SEQ ID NOS: 232
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 142
/ LENGTH: 22
/ TYPE: DNA
```

```
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence:real-time PCR
US-10-285-976-142
```

```
Query Match          0.1%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1360 TCACCTACCTGGTGGCCCTG 1379
Db      20 TCACCTACCTGGTGGACATG 1
```

```
RESULT 777
```

```
US-09-888-326-395/C
/ Sequence 395, Application US/09888326
/ Publication No. US20030026801A1
/ GENERAL INFORMATION:
/ APPLICANT: Welner, George
/ APPLICANT: Hartmann, Gunther
/ TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
/ TITLE OF INVENTION: Cell Lysis and Treating Cancer
/ FILE REFERENCE: C1039/7052 (AWS)
/ CURRENT APPLICATION NUMBER: US/09/888,326
/ CURRENT FILING DATE: 2001-06-22
/ PRIOR APPLICATION NUMBER: US 60/213,346
/ PRIOR FILING DATE: 2000-06-22
/ NUMBER OF SEQ ID NOS: 848
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 395
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Synthetic oligonucleotide
/ NAME/KEY: misc feature
/ LOCATION: (0) - (0)
/ OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-395
```

```
Query Match          0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      103 CAGGAGCCGCCGCCACCCG 120
Db      18 CAGGAGCCGCCGCCACACG 1
```

```
RESULT 778
```

```
US-09-776-479-629/C
/ Sequence 629, Application US/09776479
/ Publication No. US20030087848A1
/ GENERAL INFORMATION:
/ APPLICANT: Bratzler, Robert L.
/ APPLICANT: Petersen, Deanna M.
/ APPLICANT: Fournon, Yves
/ TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
/ TITLE OF INVENTION: Treatment of Asthma and Allergy
/ FILE REFERENCE: C1037/7013 (HCL/MAT)
/ CURRENT APPLICATION NUMBER: US/09/776,479
/ CURRENT FILING DATE: 2001-02-02
/ PRIOR APPLICATION NUMBER: US 60/179,991
/ PRIOR FILING DATE: 2000-02-03
/ NUMBER OF SEQ ID NOS: 1093
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 629
/ LENGTH: 18
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
```

OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-629

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
DB 18 CAGGAGCCGCCACAGC 1

RESULT 779

US-09-776-479-629/c  
Sequence 629, Application US/097766479  
Publication No. US20040067902A9  
GENERAL INFORMATION:  
APPLICANT: Bratzler, Robert L.  
APPLICANT: Petersen, Deanna M.  
APPLICANT: Fourn, Yves  
TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the  
FILE REFERENCE: C1037/7013 (HCL/MAT)  
CURRENT APPLICATION NUMBER: US/09/776,479  
CURRENT FILING DATE: 2001-02-02  
PRIOR APPLICATION NUMBER: US 60/179,991  
PRIOR FILING DATE: 2000-02-03  
NUMBER OF SEQ ID NOS: 1093  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 629  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Sequence  
US-09-776-479-629

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
DB 18 CAGGAGCCGCCACAGC 1

RESULT 780

US-10-181-603-11/c  
Sequence 11, Application US/10181603  
Publication No. US20030049662A1  
GENERAL INFORMATION:  
APPLICANT: Brett P. Monla  
APPLICANT: Lex M. Cowseart  
TITLE OF INVENTION: ANTISENSE MODULATION OF SMAD7 EXPRESSION  
FILE REFERENCE: RSP-0342  
CURRENT APPLICATION NUMBER: US/10/181,603  
CURRENT FILING DATE: 2002-07-17  
PRIOR APPLICATION NUMBER: PCT/US01/01165  
PRIOR FILING DATE: 2001-01-12  
PRIOR APPLICATION NUMBER: 09/487,444  
PRIOR FILING DATE: 2000-01-19  
NUMBER OF SEQ ID NOS: 49  
SEQ ID NO 11  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-181-603-11

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 180 CTGCTGCTGCTGCTGCG 197  
DB 18 CTGCTGCTGCTGCTGCG 1

RESULT 781

US-10-112-653-605/c  
Sequence 605, Application US/10112653  
Publication No. US20030050268A1  
GENERAL INFORMATION:  
APPLICANT: Krieger, Arthur M.  
APPLICANT: Berg, Daniel J.  
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR  
FILE REFERENCE: C01039/70060(LAWS)  
CURRENT APPLICATION NUMBER: US/10/112,653  
CURRENT FILING DATE: 2002-03-29  
PRIOR APPLICATION NUMBER: US 60/279,642  
PRIOR FILING DATE: 2001-03-29  
NUMBER OF SEQ ID NOS: 1040  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 605  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic Oligonucleotide  
US-10-112-653-605

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
DB 18 CAGGAGCCGCCACAGC 1

RESULT 782

US-10-054-387-48  
Sequence 48, Application US/10054387  
Publication No. US20030054365A1  
GENERAL INFORMATION:  
APPLICANT: Xu, Minzhen  
APPLICANT: Qiu, Gang  
APPLICANT: Humphreys, Robert  
TITLE OF INVENTION: CANCER CELL VACCINE  
FILE REFERENCE: U.S. Application 09/205,995, (CIP)  
CURRENT APPLICATION NUMBER: US/10/054,387  
CURRENT FILING DATE: 2002-01-22  
PRIOR APPLICATION NUMBER: 09/036,746  
PRIOR FILING DATE: 1998-03-09  
PRIOR APPLICATION NUMBER: 08/661,627  
PRIOR FILING DATE: 1996-06-11  
NUMBER OF SEQ ID NOS: 79  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 48  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: antisense  
OTHER INFORMATION: Oligonucleotide corresponding to a specific region  
OTHER INFORMATION: of the mouse Il gene.  
US-10-054-387-48

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCTG 194  
DB 18 CTGCTGCTGCTGCTGCTG 1

Db 1 CTGCTGCTGTGCTGCTG 18

RESULT 783  
US-10-017-995-629/c  
; Sequence 629, Application US/10017995  
; Publication No. US20030055014A1  
; GENERAL INFORMATION:  
; APPLICANT: Batzler, Robert L.  
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids  
; FILE REFERENCE: C1037/7025 (HCL/MAT)  
; CURRENT APPLICATION NUMBER: US/10/017,995  
; CURRENT FILING DATE: 2001-12-18  
; PRIOR APPLICATION NUMBER: US 60/255,534  
; PRIOR FILING DATE: 2000-12-14  
; NUMBER OF SEQ ID NOS: 1093  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 629  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-017-995-629

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
Db 18 CAGGAGCCGCCACACG 1

RESULT 784  
US-10-314-578-629/c  
; Sequence 629, Application US/10314578  
; Publication No. US20030212026A1  
; GENERAL INFORMATION:  
; APPLICANT: Krieg, Arthur M.  
; APPLICANT: Schetter, Christian  
; APPLICANT: Vollmer, Jörg  
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids  
; FILE REFERENCE: C1039/7035 (HCL/MAT)  
; CURRENT APPLICATION NUMBER: US/10/314,578  
; CURRENT FILING DATE: 2002-12-09  
; PRIOR APPLICATION NUMBER: US 60/156,113  
; PRIOR FILING DATE: 1999-09-25  
; PRIOR APPLICATION NUMBER: US 60/156,135  
; PRIOR FILING DATE: 1999-09-27  
; PRIOR APPLICATION NUMBER: US 60/227,436  
; PRIOR FILING DATE: 2000-08-23  
; NUMBER OF SEQ ID NOS: 1145  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 629  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic Sequence  
US-10-314-578-629

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
Db 18 CAGGAGCCGCCACACG 1

RESULT 785  
US-10-297-068-100

; Sequence 100, Application US/10297068  
; Publication No. US20030228585A1  
; GENERAL INFORMATION:  
; APPLICANT: INOKO, Hidetoshi  
; APPLICANT: KAGIYA, Taeko  
; APPLICANT: ICHIHARA, Tatsuo  
; APPLICANT: Matsumura, Yoshiyuki  
; APPLICANT: MORIYA, Shogo  
; APPLICANT: NISHIDA, Michio  
; TITLE OF INVENTION: KIT AND METHOD FOR DETERMINING HLA TYPES  
; FILE REFERENCE: J140P1174  
; CURRENT APPLICATION NUMBER: US/10/297,068  
; CURRENT FILING DATE: 2002-11-27  
; PRIOR APPLICATION NUMBER: JP 2000-164798  
; PRIOR FILING DATE: 2000-06-01  
; NUMBER OF SEQ ID NOS: 1298  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 100  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:capture  
US-10-297-068-100

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 157 CGCTGCTGGCGCTGCTG 174  
Db 1 CGCTGCTGGCGCTGCTG 18

RESULT 786  
US-10-455-247-2/c  
; Sequence 2, Application US/10455247  
; Publication No. US200400949A1  
; GENERAL INFORMATION:  
; APPLICANT: Krieg, Arthur M.  
; TITLE OF INVENTION: Method for Treating Autoimmune or Inflammatory Diseases with Combi  
; TITLE OF INVENTION: of Inhibitory Oligonucleotides and Small Molecule Antagonists of  
; TITLE OF INVENTION: Immunostimulatory CpG Nucleic Acids  
; FILE REFERENCE: C01037.70046.US  
; CURRENT APPLICATION NUMBER: US/10/455,247  
; CURRENT FILING DATE: 2003-06-05  
; PRIOR APPLICATION NUMBER: US 60/386,274  
; PRIOR FILING DATE: 2002-06-05  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: PatentIn Version 3.1  
; SEQ ID NO 2  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide  
US-10-455-247-2

Query Match 0.1%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 103 CAGGAGCCGCCACCGC 120  
Db 18 CAGGAGCCGCCACACG 1

RESULT 787  
US-10-436-231-5/c  
; Sequence 5, Application US/10436231  
; Publication No. US20040175704A1  
; GENERAL INFORMATION:  
; APPLICANT: Stratagene

```
; APPLICANT: Sorge, Joseph A
; APPLICANT: Firmin, Andrew
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR POLYNUCLEOTIDE SEQUENCE DETECTION
; FILE REFERENCE: 25436/2382
; CURRENT APPLICATION NUMBER: US/10/436,231
; PRIOR FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: US 60/452,481
; PRIOR FILING DATE: 2003-03-06
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 5
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Example Allele A comprising tandem repeats
; US-10-436-231-5
```

```
Query Match          0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      174 GCGCTGCTGCTGCTGCTG 191
Db      18 GGGCTGCTGCTGCTGCTG 1
```

```
RESULT 788
US-10-436-231-6
; Sequence 6, Application US/10436231
; Publication No. US20040175704A1
; GENERAL INFORMATION:
; APPLICANT: StrataGene
; APPLICANT: Sorge, Joseph A
; APPLICANT: Firmin, Andrew
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR POLYNUCLEOTIDE SEQUENCE DETECTION
; FILE REFERENCE: 25436/2382
; CURRENT APPLICATION NUMBER: US/10/436,231
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: US 60/452,481
; PRIOR FILING DATE: 2003-03-06
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Example Allele A comprising tandem repeats
; US-10-436-231-6
```

```
Query Match          0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      174 GCGCTGCTGCTGCTGCTG 191
Db      1 GGGCTGCTGCTGCTGCTG 18
```

```
RESULT 789
US-10-831-778-629/c
; Sequence 629, Application US/10831778
; Publication No. US20040235774A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/831,778
; CURRENT FILING DATE: 2004-04-23
```

```
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 629
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
; US-10-831-778-629
```

```
Query Match          0.1%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      103 CAGGAGCGCCGCCACCGC 120
Db      18 CAGGAGCGCCGCCACAGC 1
```

```
RESULT 790
US-09-263-959-793
; Sequence 793, Application US/09263959
; Patent No. US20020150891A1
; GENERAL INFORMATION:
; APPLICANT: Hood, Leroy E.
; APPLICANT: Rowen, Lee
; APPLICANT: Koop, Ben F.
; TITLE OF INVENTION: DIAGNOSTIC AND THERAPEUTIC COMPOSITIONS AND METHODS WHICH UTI
; NUMBER OF SEQUENCES: 1279
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Seed and Berry LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: US
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/263,959
; FILING DATE: 05-MAR-1999
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: McMaisters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 920010.426C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 682-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 793:
```

```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-09-263-959-793
```

```
Query Match          0.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      176 GCTGCTGCTGCTGCTGCT 193
Db      2 GCTGCTGCTGCTGCTGCT 19
```

```
RESULT 791
US-10-205-309-106
```



```
; Sequence 106, Application US/10205309
; Publication No. US20030190635A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Alzheimer's Disease Using
; FILE REFERENCE: 900/033
; CURRENT APPLICATION NUMBER: US/10/205,309
; CURRENT FILING DATE: 2002-10-25
; NUMBER OF SEQ ID NOS: 674
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 106
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/siNA sense s
US-10-205-309-106
```

```
Query Match 0.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 4.3e+02;
Matches 13; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
```

```
OY 163 TGGCGCTGCTGCGCTGC 180
Db 2 UGGCGCTGCTGCGCTGC 19
```

```
RESULT 792
US-10-205-309-431/c
; Sequence 431, Application US/10205309
; Publication No. US20030190635A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Alzheimer's Disease Using
; FILE REFERENCE: 900/033
; CURRENT APPLICATION NUMBER: US/10/205,309
; CURRENT FILING DATE: 2002-10-25
; NUMBER OF SEQ ID NOS: 674
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 431
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-205-309-431
```

```
Query Match 0.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
OY 163 TGGCGCTGCTGCGCTGC 180
Db 18 TGGCGCTGCTGCGCTGC 1
```

```
RESULT 793
US-10-888-226-112
; Sequence 112, Application US/10888226
; Publication No. US20050124568A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Usman, Nasim
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Acetyl-CoA-Carboxylase
; FILE REFERENCE: 400-199 (MHB03-710-A)
; CURRENT APPLICATION NUMBER: US/10/888,226
; CURRENT FILING DATE: 2004-07-09
```

```
; PRIOR APPLICATION NUMBER: US 60/486,729
; PRIOR FILING DATE: 2003-07-11
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358580
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 955
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 112
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-888-226-112
```

```
Query Match 0.1%; Score 16.4; DB 1; Length 19;
Best Local Similarity 77.8%; Pred. No. 4.3e+02;
Matches 14; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
```

```
OY 1109 GACTCTCCGAGAACTGAA 1126
Db 1 GACUGGCGAGAACTGAA 18
```

```
RESULT 794
US-10-888-226-526/c
; Sequence 526, Application US/10888226
; Publication No. US20050124568A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Usman, Nasim
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Acetyl-CoA-Carboxylase
; FILE REFERENCE: 400-199 (MHB03-710-A)
; CURRENT APPLICATION NUMBER: US/10/888,226
; CURRENT FILING DATE: 2004-07-09
; PRIOR APPLICATION NUMBER: US 60/486,729
; PRIOR FILING DATE: 2003-07-11
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358580
; PRIOR FILING DATE: 2002-02-20
```



```
FILE REFERENCE: 6251.US.P1
CURRENT APPLICATION NUMBER: US/09/850,178
CURRENT FILING DATE: 2001-05-07
PRIOR APPLICATION NUMBER: US 08/972,376
PRIOR FILING DATE: 1997-11-18
NUMBER OF SEQ ID NOS: 33
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 13
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Primer
US-09-850-178-13
```

```
Query Match      0.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 4.6e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      829 CTTGTCAACTCTGATCA 846
Db      2 CTTGTCAACTCTGTTCA 19
```

```
RESULT 798
US-09-948-002-35/C
Sequence 35, Application US/09948002
Publication No. US2003050265A1
GENERAL INFORMATION:
APPLICANT: Nicholas M. Dean
APPLICANT: Susan F. Murray
TITLE OF INVENTION: ANTISENSE MODULATION OF TRANSFORMING GROWTH
FILE REFERENCE: ISPH-0607
CURRENT APPLICATION NUMBER: US/09/948,002
CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 09/661,753
PRIOR FILING DATE: 2000-09-14
PRIOR APPLICATION NUMBER: 60/154,546
PRIOR FILING DATE: 1999-09-17
NUMBER OF SEQ ID NOS: 71
SEQ ID NO 35
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-09-948-002-35
```

```
Query Match      0.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 4.6e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      176 GCTGCTGCTGCTGCTGCT 193
Db      20 GCTGCTGCTGCTGCTGCT 3
```

```
RESULT 799
US-09-563-728A-7
Sequence 7, Application US/09563728A
Publication No. US20030078216A1
GENERAL INFORMATION:
APPLICANT: Macleod, Alan R
APPLICANT: Li, Zoumei
APPLICANT: Besterman, Jeffrey M
TITLE OF INVENTION: Inhibition of Histone Deacetylase
FILE REFERENCE: 106101,229
CURRENT APPLICATION NUMBER: US/09/563,728A
CURRENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/132,287
PRIOR FILING DATE: 1999-05-03
NUMBER OF SEQ ID NOS: 36
```

```
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-09-563-728A-7
```

```
Query Match      0.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 4.6e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      177 CTGCTGCTGCTGCTGCTG 194
Db      2 CTGCTGCTGCTGCTGCTG 19
```

```
RESULT 800
US-09-563-728A-16
Sequence 16, Application US/09563728A
Publication No. US20030078216A1
GENERAL INFORMATION:
APPLICANT: Macleod, Alan R
APPLICANT: Li, Zoumei
APPLICANT: Besterman, Jeffrey M
TITLE OF INVENTION: Inhibition of Histone Deacetylase
FILE REFERENCE: 106101,229
CURRENT APPLICATION NUMBER: US/09/563,728A
CURRENT FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/132,287
PRIOR FILING DATE: 1999-05-03
NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 16
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: modified base
LOCATION: 1-4 and 17-20 are modified
OTHER INFORMATION: Positions 1-4 and 17-20 are 2'-methoxyribose
OTHER INFORMATION: substituted nucleotides; positions 5-16 are
OTHER INFORMATION: deoxyribonucleotides
US-09-563-728A-16
```

```
Query Match      0.1%; Score 16.4; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 4.6e+02;
Matches 15; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      177 CTGCTGCTGCTGCTGCTG 194
Db      2 CTGCTGCTGCTGCTGCTG 19
```

```
RESULT 801
US-10-145-493B-52
Sequence 52, Application US/10145493B
Publication No. US20030096777A1
GENERAL INFORMATION:
APPLICANT: Besterman, Jeffrey
APPLICANT: Macleod, Robert
APPLICANT: Siders, William
TITLE OF INVENTION: Modulation of Gene Expression by Combination Therapy
FILE REFERENCE: MET-015DV
CURRENT APPLICATION NUMBER: US/10/145,493B
CURRENT FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 09/420,692
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: US 60/104,804
PRIOR FILING DATE: 1998-10-19
NUMBER OF SEQ ID NOS: 90
```

```
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 52
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: primer
US-10-145-493B-52

Query Match
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCTG 194
Db 2 CTCCTGCTGCTGCTGCTG 19

RESULT 802
US-10-401-343-43
/ Sequence 43, Application US/10401343
/ Publication No. US20030194735A1
/ GENERAL INFORMATION:
/ APPLICANT: Barnett, Charles J
/ TITLE OF INVENTION: Detection of Wheat and Barley Fungal Pathogens which are
/ TITLE OF INVENTION: Resistant To Certain Fungicides Using The Polymerase Chain
/ FILE REFERENCE: 70008USNP
/ CURRENT APPLICATION NUMBER: US/10/401,343
/ CURRENT FILING DATE: 2003-03-27
/ PRIOR APPLICATION NUMBER: 60/369,796
/ PRIOR FILING DATE: 2002-04-03
/ NUMBER OF SEQ ID NOS: 77
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 43
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: artificial sequence
/ FEATURE:
/ OTHER INFORMATION: primer
/ NAME/KEY: misc feature
/ LOCATION: (1)..(20)
US-10-401-343-43

Query Match
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2971 CCAAAACGAGGTGATCC 2388
Db 1 CCAGAACGAGGTGATCC 18

RESULT 803
US-10-401-343-44
/ Sequence 44, Application US/10401343
/ Publication No. US20030194735A1
/ GENERAL INFORMATION:
/ APPLICANT: Barnett, Charles J
/ APPLICANT: Beck, James J
/ TITLE OF INVENTION: Detection of Wheat and Barley Fungal Pathogens which are
/ TITLE OF INVENTION: Resistant To Certain Fungicides Using The Polymerase Chain
/ FILE REFERENCE: 70008USNP
/ CURRENT APPLICATION NUMBER: US/10/401,343
/ CURRENT FILING DATE: 2003-03-27
/ PRIOR APPLICATION NUMBER: 60/369,796
/ PRIOR FILING DATE: 2002-04-03
/ NUMBER OF SEQ ID NOS: 77
/ SOFTWARE: PatentIn version 3.2
/ SEQ ID NO 44
```

```
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: artificial sequence
/ FEATURE:
/ OTHER INFORMATION: primer
/ NAME/KEY: misc feature
/ LOCATION: (1)..(20)
US-10-401-343-44

Query Match
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2971 CCAAAACGAGGTGATCC 2388
Db 3 CCAGAACGAGGTGATCC 20

RESULT 804
US-10-148-835-86
/ Sequence 86, Application US/10148835
/ Publication No. US20030207380A1
/ GENERAL INFORMATION:
/ APPLICANT: SAITO et al.
/ TITLE OF INVENTION: MUTANT ER alpha AND TEST SYSTEMS FOR TRANSACTIVATION
/ FILE REFERENCE: 2185-0648P
/ CURRENT APPLICATION NUMBER: US/10/148,835
/ CURRENT FILING DATE: 2002-10-11
/ NUMBER OF SEQ ID NOS: 213
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 86
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence:Designed
US-10-148-835-86

Query Match
Best Local Similarity 94.4%; Score 16.4; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGC 192
Db 2 CGCTGCTGCTGCTGCTGC 19

RESULT 805
US-10-633-163-35/C
/ Sequence 35, Application US/10633163
/ Publication No. US20040063655A1
/ GENERAL INFORMATION:
/ APPLICANT: Nicholas M. Dean
/ APPLICANT: Susan F. Murray
/ TITLE OF INVENTION: ANTISENSE MODULATION OF TRANSFORMING GROWTH
/ TITLE OF INVENTION: FACTOR BETA EXPRESSION
/ FILE REFERENCE: ISPH-0607
/ CURRENT APPLICATION NUMBER: US/10/633,163
/ CURRENT FILING DATE: 2003-08-01
/ PRIOR APPLICATION NUMBER: US/09/948,002
/ PRIOR FILING DATE: 2000-09-05
/ PRIOR APPLICATION NUMBER: 09/661,753
/ PRIOR FILING DATE: 2000-09-14
/ PRIOR APPLICATION NUMBER: 60/154,546
/ PRIOR FILING DATE: 1999-09-17
/ NUMBER OF SEQ ID NOS: 71
/ SEQ ID NO 35
/ LENGTH: 20
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
```

OTHER INFORMATION: Antisense Oligonucleotide  
US-10-633-163-35

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 4.6e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTGCT 193  
Db 20 GCTGCTGCTGCTGCTGCT 3

RESULT 806

US-10-315-962-67/c  
Sequence 67, Application US/10315962  
Publication No. US20040109848A1  
GENERAL INFORMATION:

APPLICANT: C. Frank Bennett  
APPLICANT: Nicholas M. Dean  
APPLICANT: Susan M. Freiler  
APPLICANT: Kenneth W. Doble  
TITLE OF INVENTION: MODULATION OF AP-2 ALPHA EXPRESSION  
FILE REFERENCE: PTS-0046  
CURRENT APPLICATION NUMBER: US/10/315,962  
CURRENT FILING DATE: 2000-12-09  
NUMBER OF SEQ ID NOS: 126  
SEQ ID NO 67  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-315-962-67

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 4.6e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTG 194  
Db 19 CTGCTGCTGCTGCTGCTG 2

RESULT 807

US-10-316-755-19/c  
Sequence 19, Application US/10316755  
Publication No. US20040110152A1  
GENERAL INFORMATION:

APPLICANT: Lex M. Cowsett  
APPLICANT: Brenda F. Baker  
TITLE OF INVENTION: MODULATION OF MATRIX METALLOPROTEINASE 11 EXPRESSION  
FILE REFERENCE: RTS-0381  
CURRENT APPLICATION NUMBER: US/10/316,755  
CURRENT FILING DATE: 2002-12-10  
NUMBER OF SEQ ID NOS: 277  
SEQ ID NO 19  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-316-755-19

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 4.6e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 175 CGCTGCTGCTGCTGCTG 192  
Db 18 CGATGCTGCTGCTGCTG 1

RESULT 808

US-10-316-755-174  
Sequence 174, Application US/10316755  
Publication No. US20040110152A1  
GENERAL INFORMATION:

APPLICANT: Brenda F. Baker  
APPLICANT: Lex M. Cowsett  
TITLE OF INVENTION: MODULATION OF MATRIX METALLOPROTEINASE 11 EXPRESSION  
FILE REFERENCE: RTS-0381  
CURRENT APPLICATION NUMBER: US/10/316,755  
CURRENT FILING DATE: 2002-12-10  
NUMBER OF SEQ ID NOS: 277  
SEQ ID NO 174  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
FEATURE:  
US-10-316-755-174

Query Match 0.1%; Score 16.4; DB 1; Length 20;  
Best Local Similarity 94.4%; Pred. No. 4.6e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 175 CGCTGCTGCTGCTGCTG 192  
Db 3 CGATGCTGCTGCTGCTG 20

RESULT 809

US-10-380-195A-2/c  
Sequence 2, Application US/10380195A  
Publication No. US20040072776A1  
GENERAL INFORMATION:

APPLICANT: Kiyama, Satoshi  
APPLICANT: Nelson, Colleen  
APPLICANT: Rennie, Paul  
TITLE OF INVENTION: Oligodeoxynucleotides for Prostate and Endocrine Tumor Therapy  
FILE REFERENCE: UBC-P-023  
CURRENT APPLICATION NUMBER: US/10/380,195A  
CURRENT FILING DATE: 2003-03-12  
PRIOR APPLICATION NUMBER: PCT/US01/28748  
PRIOR FILING DATE: 2001-09-13  
PRIOR APPLICATION NUMBER: US 60/232,641  
PRIOR FILING DATE: 2000-09-14  
NUMBER OF SEQ ID NOS: 63  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 2  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: IGFBR2 antisense  
US-10-380-195A-2

Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 4.9e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTGCTG 4

RESULT 810

US-10-380-195A-46/c  
Sequence 46, Application US/10380195A  
Publication No. US20040072776A1  
GENERAL INFORMATION:

APPLICANT: Gleave, Martin  
APPLICANT: Kiyama, Satoshi  
APPLICANT: Nelson, Colleen  
APPLICANT: Rennie, Paul

;; TITLE OF INVENTION: Antisense Insulin-Like Growth Factor Binding Protein (IGFBP)-2  
;; TITLE OF INVENTION: Oligodeoxynucleotides for Prostate and Endocrine Tumor Therapy  
;; FILE REFERENCE: UBC-P-023  
;; CURRENT APPLICATION NUMBER: US/10/380,195A  
;; CURRENT FILING DATE: 2003-03-12  
;; PRIOR APPLICATION NUMBER: PCT/US01/28748  
;; PRIOR FILING DATE: 2001-09-13  
;; PRIOR APPLICATION NUMBER: US 60/232,641  
;; PRIOR FILING DATE: 2000-09-14  
;; NUMBER OF SEQ ID NOS: 63  
;; SOFTWARE: PatentIn version 3.2  
;; SEQ ID NO 46  
;; LENGTH: 21  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: IGFBP2 antisense  
;; US-10-380-195A-46

Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 4.9e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 178 TGCTGCTGCTGCTGCTG 195  
Db 21 TGCTGCTGCTGCTGCTG 4

## RESULT 811

;; US-10-751-736-10540  
;; Sequence 10540, Application US/10751,736  
;; Publication No. US20040265230A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Wyeth  
;; APPLICANT: Martinez, Robert  
;; APPLICANT: Brown, Eugene  
;; APPLICANT: Liu, Wei  
;; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
;; FILE REFERENCE: AM100927 (031896-002000)  
;; CURRENT APPLICATION NUMBER: US/10/751,736  
;; CURRENT FILING DATE: 2003-01-06  
;; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
;; PRIOR FILING DATE: 2003-01-06  
;; NUMBER OF SEQ ID NOS: 54873  
;; SOFTWARE: PatentIn version 3.2  
;; SEQ ID NO 10540  
;; LENGTH: 21  
;; TYPE: DNA  
;; ORGANISM: homo sapiens  
;; US-10-751-736-10540

Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 4.9e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCT 193  
Db 1 GATGCTGCTGCTGCTGCT 18

## RESULT 812

;; US-10-751-736-44754/C  
;; Sequence 44754, Application US/10751,736  
;; Publication No. US20040265230A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Wyeth  
;; APPLICANT: Martinez, Robert  
;; APPLICANT: Brown, Eugene  
;; APPLICANT: Liu, Wei  
;; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
;; FILE REFERENCE: AM100927 (031896-002000)

;; CURRENT APPLICATION NUMBER: US/10/751,736  
;; CURRENT FILING DATE: 2003-01-06  
;; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
;; PRIOR FILING DATE: 2003-01-06  
;; NUMBER OF SEQ ID NOS: 54873  
;; SOFTWARE: PatentIn version 3.2  
;; SEQ ID NO 44754  
;; LENGTH: 21  
;; TYPE: RNA  
;; ORGANISM: RNAi  
;; US-10-751-736-44754

Query Match 0.1%; Score 16.4; DB 1; Length 21;  
Best Local Similarity 94.4%; Pred. No. 4.9e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 997 ACACACCAAGATCAACA 1014  
Db 21 ACAACCAAGATCAACA 4

## RESULT 813

;; US-09-776-874A-17/C  
;; Sequence 17, Application US/09776874A  
;; Patent No. US20020102560A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Pecker, Iris  
;; APPLICANT: Vlodavsky, Israel  
;; APPLICANT: Feinstein, Elena  
;; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY  
;; FILE REFERENCE: 01/22603  
;; CURRENT APPLICATION NUMBER: US/09/776,874A  
;; CURRENT FILING DATE: 2001-12-12  
;; PRIOR APPLICATION NUMBER: US 08/922,170  
;; PRIOR FILING DATE: 1997-09-02  
;; PRIOR APPLICATION NUMBER: US 09/109,386  
;; PRIOR FILING DATE: 1998-07-10  
;; PRIOR APPLICATION NUMBER: PCT/US98/17954  
;; PRIOR FILING DATE: 1998-08-31  
;; NUMBER OF SEQ ID NOS: 47  
;; SOFTWARE: PatentIn version 3.1  
;; SEQ ID NO 17  
;; LENGTH: 21  
;; TYPE: DNA  
;; ORGANISM: Artificial sequence  
;; FEATURE:  
;; OTHER INFORMATION: synthetic oligonucleotide  
;; US-09-776-874A-17

Query Match 0.1%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 5.2e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCTGCG 197  
Db 21 CTGATGCTGCTGCTGCTG 1

## RESULT 814

;; US-09-880-732-31/C  
;; Sequence 31, Application US/09880732  
;; Patent No. US20020127561A1  
;; GENERAL INFORMATION:  
;; APPLICANT: GENICON SCIENCES CORPORATION  
;; APPLICANT: BEE, Gary  
;; APPLICANT: KOHN, David E.  
;; APPLICANT: KORN, Linda  
;; APPLICANT: PETERSON, Todd  
;; APPLICANT: YGGERABADE, Juan  
;; TITLE OF INVENTION: ASSAY FOR GENETIC POLYMORPHISMS USING SCATTERED LIGHT DETECTABLE  
;; FILE REFERENCE: 089498/0403  
;; CURRENT APPLICATION NUMBER: US/09/880,732

```

; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/210,988
; PRIOR FILING DATE: 2000-06-12
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 31
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Exemplary probe for CYP2D6 allele detection
US-09-880-732-31
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      4753 TCTCCCTCACTCCACCTCTG 4773
Db      21  TCACCTCACCCTCCATCTCTG 1
```

## RESULT 815

```

; Sequence 17, Application US/09988113
; Patent No. US20020168749A1
; GENERAL INFORMATION:
; APPLICANT: Pecker, Iris
; APPLICANT: Vlodavsky, Israel
; APPLICANT: Feinstein, Elena
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY
; FILE REFERENCE: 01/22781
; CURRENT APPLICATION NUMBER: US/09/988, 113
; CURRENT FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 09/776,874
; PRIOR FILING DATE: 2001-02-06
; PRIOR APPLICATION NUMBER: US09/258,892
; PRIOR FILING DATE: 1999-03-01
; PRIOR APPLICATION NUMBER: PCT/US98/17954
; PRIOR FILING DATE: 1998-08-31
; PRIOR APPLICATION NUMBER: US 09/109,386
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: US 08/922,170
; PRIOR FILING DATE: 1997-09-02
; NUMBER OF SEQ ID NOS: 47
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-988-113-17
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      177 CTGCTGCTGCTGCTGCGG 197
Db      21  CTGATGCTGCTGCTGCGGG 1
```

## RESULT 816

```

; Sequence 19, Application US/09750609
; Publication No. US20030170875A1
; GENERAL INFORMATION:
; APPLICANT: Robertson, David
; APPLICANT: Blakely, Randy D.
; TITLE OF INVENTION: GENETIC MUTATION UNDERLYING ORTHOSTATIC INTOLERANCE AND
```

```

; TITLE OF INVENTION: DIAGNOSTIC AND THERAPEUTIC METHODS RELATING THERETO
; FILE REFERENCE: Attorney Docket No. US20030170875A1 1242-27-2-2
; CURRENT APPLICATION NUMBER: US/09/750,609
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: 60/175,456
; PRIOR FILING DATE: 2000-01-11
; PRIOR APPLICATION NUMBER: 60/173,682
; PRIOR FILING DATE: 1999-12-29
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 19
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-750-609-19
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      2632 CTTTGAACTCCCACTGGAG 2652
Db      1  CCTTAGATTCACCACTGGAG 21
```

## RESULT 817

```

; Sequence 14, Application US/10000639
; Publication No. US20020192777A1
; GENERAL INFORMATION:
; APPLICANT: SHEPPARD, PAUL O.
; APPLICANT: VU, TUYEN O.
; APPLICANT: FELDHAUS, ANDREW L.
; APPLICANT: HALDEMAN, BETTY A.
; TITLE OF INVENTION: Testis Protein, zsi986
; FILE REFERENCE: 00-44
; CURRENT APPLICATION NUMBER: US/10/000,639
; CURRENT FILING DATE: 2001-11-01
; PRIOR APPLICATION NUMBER: 60/245,070
; PRIOR FILING DATE: 2000-11-01
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide primer, ZC37986
US-10-000-639-14
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      166 CGCTGCTGCGCTGCTGCTGC 186
Db      1  CGTGCTGCTGCTGCTGCTGC 21
```

## RESULT 818

```

; Sequence 17, Application US/10341582
; Publication No. US20030161823A1
; GENERAL INFORMATION:
; APPLICANT: Neta Ilan
; APPLICANT: Israel Vlodavsky
; APPLICANT: Oron Yacoby-Zeevi
; APPLICANT: Itis Pecker
; TITLE OF INVENTION: THERAPEUTIC AND COSMETIC USES OF HEPARANASES
; FILE REFERENCE: 25449
; CURRENT APPLICATION NUMBER: US/10/341,582
; CURRENT FILING DATE: 2003-01-14
; NUMBER OF SEQ ID NOS: 47
```

```
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-341-582-17

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      177 CTGCTGCTGCTGCTGCTGCGG 197
Db      21 CTGATGCTGCTGCTGCTGCGG 1

RESULT 819
US-10-384-451-17/c
; Sequence 17, Application US/10384451
; Publication No. US20030170860A1
; GENERAL INFORMATION:
; APPLICANT: Pecker, Iris
; APPLICANT: Violdavsky, Israel
; APPLICANT: Feinstein, Elena
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY
; FILE REFERENCE: 25718
; CURRENT APPLICATION NUMBER: US/10/384,451
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 47
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-384-451-17

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      177 CTGCTGCTGCTGCTGCTGCGG 197
Db      21 CTGATGCTGCTGCTGCTGCGG 1

RESULT 820
US-10-384-450-17/c
; Sequence 17, Application US/10384450
; Publication No. US20030190737A1
; GENERAL INFORMATION:
; APPLICANT: Pecker, Iris
; APPLICANT: Violdavsky, Israel
; APPLICANT: Feinstein, Elena
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY
; FILE REFERENCE: 25717
; CURRENT APPLICATION NUMBER: US/10/384,450
; CURRENT FILING DATE: 2003-03-10
; NUMBER OF SEQ ID NOS: 47
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-384-450-17
```

```
Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      177 CTGCTGCTGCTGCTGCTGCGG 197
Db      21 CTGATGCTGCTGCTGCTGCGG 1

RESULT 821
US-10-371-218A-17/c
; Sequence 17, Application US/10371218A
; Publication No. US20030217375A1
; GENERAL INFORMATION:
; APPLICANT: Zcharia, Eyal
; APPLICANT: Violdavsky, Israel
; APPLICANT: Metzger, Shula
; APPLICANT: Pecker, Iris
; APPLICANT: Ilan, Neta
; APPLICANT: Chajek-Shaul, Tova
; APPLICANT: Goldshmidt, Orit
; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING HEPARANASE AND USRS THEREOF
; FILE REFERENCE: 25783
; CURRENT APPLICATION NUMBER: US/10/371,218A
; CURRENT FILING DATE: 2003-07-01
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Single strand DNA oligonucleotide
US-10-371-218A-17

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      177 CTGCTGCTGCTGCTGCTGCGG 197
Db      21 CTGATGCTGCTGCTGCTGCGG 1

RESULT 822
US-10-456-573-17/c
; Sequence 17, Application US/10456573
; Publication No. US20030236215A1
; GENERAL INFORMATION:
; APPLICANT: Pecker, Iris
; APPLICANT: Violdavsky, Israel
; APPLICANT: Feinstein, Elena
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY
; FILE REFERENCE: 25677
; CURRENT APPLICATION NUMBER: US/10/456,573
; CURRENT FILING DATE: 2003-06-09
; PRIOR APPLICATION NUMBER: US 09/435,739
; PRIOR FILING DATE: 1999-11-08
; PRIOR APPLICATION NUMBER: US 09/258,892
; PRIOR FILING DATE: 1999-03-01
; PRIOR APPLICATION NUMBER: PCT/US98/17954
; PRIOR FILING DATE: 1998-08-03
; PRIOR APPLICATION NUMBER: US 08/922,170
; PRIOR FILING DATE: 1997-09-02
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 17
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Single strand DNA oligonucleotide
US-10-456-573-17
```



US-10-456-573-17

Query Match

Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCTGCG 197

DB 21 CTGATGCTGCTGCTGCTGCG 1

RESULT 823

US-10-380-195A-58/c

Sequence 58, Application US/10380195A

Publication No. US20040072776A1

GENERAL INFORMATION:

APPLICANT: Gleave, Martin

APPLICANT: Kiyama, Satoshi

APPLICANT: Nelson, Colleen

APPLICANT: Rennie, Paul

TITLE OF INVENTION: Antisense Insulin-Like Growth Factor Binding Protein (IGFBP)-2

FILE REFERENCE: UBC-P-023

CURRENT APPLICATION NUMBER: US/10/380,195A

PRIOR FILING DATE: 2003-03-12

PRIOR APPLICATION NUMBER: PCT/US01/28748

PRIOR FILING DATE: 2001-09-13

PRIOR APPLICATION NUMBER: US 60/232,641

PRIOR FILING DATE: 2000-09-14

NUMBER OF SEQ ID NOS: 63

SOFTWARE: PatentIn version 3.2

SEQ ID NO 58

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: IGFBP2 mismatch antisense

US-10-380-195A-58

Query Match

Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 181 TGCTGCTGCTGCTGCGGCG 201

DB 21 TGCTGCTGCTGCTGCGGCG 1

RESULT 824

US-10-785-116-17/c

Sequence 17, Application US/10785116

Publication No. US20040142427A1

GENERAL INFORMATION:

APPLICANT: Becker, Iris

APPLICANT: Vlodavsky, Israel

APPLICANT: Feinstein, Elena

TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARINASE ACTIVITY

FILE REFERENCE: 27674

CURRENT APPLICATION NUMBER: US/10/785,116

PRIOR FILING DATE: 2004-02-25

NUMBER OF SEQ ID NOS: 47

SOFTWARE: PatentIn version 3.1

SEQ ID NO 17

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide

US-10-785-116-17

Query Match

Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCTGCG 197

DB 21 CTGATGCTGCTGCTGCTGCG 1

RESULT 825

US-10-751-736-2436

Sequence 2436, Application US/10751736

Publication No. US20040265230A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Martinez, Robert

APPLICANT: Brown, Eugene

APPLICANT: Liu, Wei

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON

FILE REFERENCE: AM100927 (031896-002000)

CURRENT APPLICATION NUMBER: US/10/751,736

PRIOR FILING DATE: 2003-01-06

PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000

PRIOR FILING DATE: 2003-01-06

NUMBER OF SEQ ID NOS: 54873

SOFTWARE: PatentIn version 3.2

SEQ ID NO 2436

LENGTH: 21

TYPE: RNA

ORGANISM: RNAi

US-10-751-736-2436

Query Match

Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;  
Matches 13; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 4878 TCTAACAGATGATATGACC 4898

DB 1 UUUACACGAGUAUUGACC 21

RESULT 826

US-10-751-736-17213

Sequence 17213, Application US/10751736

Publication No. US20040265230A1

GENERAL INFORMATION:

APPLICANT: Wyeth

APPLICANT: Martinez, Robert

APPLICANT: Brown, Eugene

APPLICANT: Liu, Wei

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON

FILE REFERENCE: AM100927 (031896-002000)

CURRENT APPLICATION NUMBER: US/10/751,736

PRIOR FILING DATE: 2003-01-06

PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000

PRIOR FILING DATE: 2003-01-06

NUMBER OF SEQ ID NOS: 54873

SOFTWARE: PatentIn version 3.2

SEQ ID NO 17213

LENGTH: 21

TYPE: RNA

ORGANISM: RNAi

US-10-751-736-17213

Query Match

Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;  
Matches 11; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QY 3031 AAGCTTTTCCTGCTGCTGAAT 3051

DB 1 AACUCCUUCUGGCUUGAGUU 21

```
RESULT 827
US-10-751-736-18182/c
; Sequence 18182, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 18182
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-18182

Query Match
Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 218 AATGCTGGAATGTCAGCCT 238
Db 21 AATGCTGGAATGTCACCTT 1

RESULT 828
US-10-751-736-21313
; Sequence 21313, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 21313
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-21313

Query Match
Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 666 GATACCGTGTATGAGACTGC 686
Db 1 GATACCGTGTATGAGACTTC 21

RESULT 829
US-10-751-736-25171
; Sequence 25171, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
```

```
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25171
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-25171

Query Match
Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 675 TATGAACTGCTCCACTCAC 695
Db 1 TATGCACTGCTCCTCTCAC 21

RESULT 830
US-10-751-736-25172
; Sequence 25172, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25172
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-25172

Query Match
Best Local Similarity 0.1%; Score 16.2; DB 1; Length 21;
Matches 12; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 677 TGGAACTGCTCCACTCAT 697
Db 1 UGGCAGCUGCUCUCUCACU 21

RESULT 831
US-10-751-736-27629/c
; Sequence 27629, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT FILING DATE: 2003-01-06
```

```

; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 27629
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi
US-10-751-736-27629
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      1990 AATCTCACTTCCAACTGTCA 2010
Db      21 AATCTCTCTTCCAGCTGTCA 1
```

```

RESULT 832
US-10-751-736-36736
; Sequence 36736, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 36736
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-36736
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      845 CAGCAGCAGCCAGCTCTGTCA 865
Db      1 CATCAGCAGCAAGTCTGTCCA 21
```

```

RESULT 833
US-10-751-736-39540/C
; Sequence 39540, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; PRIOR FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 39540
; LENGTH: 21
; TYPE: RNA
```

```

; ORGANISM: RNAi
US-10-751-736-39540
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      207 GCCGAGAGGAATGCTGGAA 227
Db      21 GCCGAGAGGAGTACAGGAA 1
```

```

RESULT 834
US-10-847-918-4344/C
; Sequence 4344, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; PRIOR FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 4344
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi-antisense strand
US-10-847-918-4344
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      4812 AAGTATGAGACTACGAGCTG 4832
Db      21 AAGTATGAGACTGTGAGCTG 1
```

```

RESULT 835
US-10-847-918-8737
; Sequence 8737, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; PRIOR FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8737
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-847-918-8737
```

```

Query Match          0.1%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 5.2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```

Qy      3638 TGAAGAGAGATTTGAATTGCA 3658
          |||||
Db      1 TAAAGAGAGACTGAAGTTGA 21

```

```

; RESULT 836
; US-10-847-918-8738
; Sequence 8738, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Slonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2.
; SEQ ID NO 8738
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAi-sense strand
; US-10-847-918-8738

```

Query Match	0.1%;	Score 16.2;	DB 1;	Length 21;
Best Local Similarity	66.7%;	Pred. No. 5.2e+02;		
Matches 14;	Conservative 4;	Mismatches 3;	Indels 0;	Gaps 0;

```

Oy      3640 AAGAGAAGATTGAATTGAAT 3660
          ||||| :||| :
Db      1 AAGAGAAGACUGAAGUUGAUU 21

```

```

RESULT 837
US-10-781-758-17/c
: Sequence 17, Application US/10781758
: Publication No. US20040146497A1
: GENERAL INFORMATION:
: APPLICANT: Neta Ilan
: APPLICANT: Israel Vlodavsky
: APPLICANT: Oron Yacoby-Zeevi
: APPLICANT: Iris Pecker
: TITLE OF INVENTION: THERAPEUTIC AND COSMETIC USES OF HEPARANASES
: FILE REFERENCE: 27525
: CURRENT APPLICATION NUMBER: US/10/781,758
: CURRENT FILING DATE: 2004-02-20
: NUMBER OF SEQ ID NOS: 47
: SOFTWARE: PatentIn version 3.1
: SEQ ID NO 17
: LENGTH: 21
: TYPE: DNA
: ORGANISM: Artificial sequence
: FEATURE:
: OTHER INFORMATION: Synthetic oligonucleotide
: US-10-781-758-17

```

Query Match	0.1%	Score 16.2;	DB 1;	Length 21;
Best Local Similarity	85.7%	Pred. No. 5.2e+02;		
Matches 18; Conservative	0;	Mismatches 3;	Indels 0;	Gaps 0;

Qy	177	CTGCTGCTGCTGCTGCGC	197
Db	21	CTGATGCTGCTGCTCCGGG	1

RESULT 838  
US-10-712-795-875/c  
; Sequence 875, Application US/10712795

Publication No. US2004021435A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 875  
LENGTH: 16  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-875

Query Match 0.1%; Score 16; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 3.8e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	3251	TCGGAAGCAGACTGAG	3266
Db	16	TGCGAAGCAGACTGAG	1

```

RESULT 839
US-10-920-612-875/c
; Sequence 875, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; CURRENT FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 875
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-920-612-875

```

Query Match	0.1%;	Score 16;	DB 1;	Length 16;
Best Local Similarity	100.0%;	Pred. No. 3.8e+02;		
Matches 16;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

Qy	3251	TGCGAAGCAGACTGAG	3266
D5	16	TGCGAAGCAGACTGAG	1

RESULT 840  
US-09-927-046-1840  
Sequence 1840, Application US/09927046  
Application No. US20030064946A1  
GENERAL INFORMATION:  
APPLICANT: Rhozyme Pharmaceuticals, Inc  
APPLICANT: Molsygen, Jim  
APPLICANT: Thompson, Jim  
APPLICANT: McKenzie, Tim  
APPLICANT: Ayers, Dave

```

; APPLICANT: Grupe, Andrew
; APPLICANT: Szymkowski, Edmund
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Calcium Activated Chloro
; TITLE OF INVENTION: Channel-1
; FILE REFERENCE: 249/021
; CURRENT APPLICATION NUMBER: US/09/927,046
; NUMBER OF SEQ ID NOS: 5450
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1840
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-927-046-1840
```

```

Query Match
Best Local Similarity 0.1%; Score 16; DB 1; Length 17;
Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 3083 CTCACAGACTCCGCC 3098
    |||||
Db 1 CUCCACAGACUCCGCC 16
```

```

RESULT 841
US-09-927-046-2169
; Sequence 2169, Application US/09927046
; Publication No. US20030064946A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc
; APPLICANT: McSwiggen, Jim
; APPLICANT: Thompson, Jim
; APPLICANT: McKenzie, Tim
; APPLICANT: Ayers, Dave
; APPLICANT: Szymkowski, Edmund
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Calcium Activated Chloro
; FILE REFERENCE: 249/021
; CURRENT APPLICATION NUMBER: US/09/927,046
; CURRENT FILING DATE: 2001-08-09
; NUMBER OF SEQ ID NOS: 5450
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2169
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-927-046-2169
```

```

Query Match
Best Local Similarity 0.1%; Score 16; DB 1; Length 17;
Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 3083 CTCACAGACTCCGCC 3098
    |||||
Db 2 CUCCACAGACUCCGCC 17
```

```

RESULT 842
US-09-822-722-2
; Sequence 2, Application US/09822722
; Patent No. US20020114772A1
; GENERAL INFORMATION:
; APPLICANT: Kishimoto, Jiro
; APPLICANT: Morgan, Bruce A.
; APPLICANT: Burgeson, Robert
; TITLE OF INVENTION: METHODS OF MODULATING HAIR GROWTH
; FILE REFERENCE: 10287-058001
; CURRENT APPLICATION NUMBER: US/09/822,722
; CURRENT FILING DATE: 2001-03-20
; PRIOR APPLICATION NUMBER: 60/261,690
; PRIOR FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 60/193,771
```

```

; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Primer for PCR
US-09-822-722-2
```

```

Query Match
Best Local Similarity 0.1%; Score 16; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 181 TGCTGCTGCTGCTGCC 196
    |||||
Db 2 TGCTGCTGCTGCTGCC 17
```

```

RESULT 843
US-10-791-368-2
; Sequence 2, Application US/10791368
; Publication No. US20040170611A1
; GENERAL INFORMATION:
; APPLICANT: Kishimoto, Jiro
; APPLICANT: Burgeson, Robert
; TITLE OF INVENTION: METHODS OF MODULATING HAIR GROWTH
; FILE REFERENCE: 10287-058001
; CURRENT APPLICATION NUMBER: US/10/791,368
; CURRENT FILING DATE: 2004-03-02
; PRIOR APPLICATION NUMBER: US/09/822,722
; PRIOR FILING DATE: 2001-03-20
; PRIOR APPLICATION NUMBER: 60/261,690
; PRIOR FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 60/193,771
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Primer for PCR
US-10-791-368-2
```

```

Query Match
Best Local Similarity 0.1%; Score 16; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```

QY 181 TGCTGCTGCTGCTGCC 196
    |||||
Db 2 TGCTGCTGCTGCTGCC 17
```

```

RESULT 844
US-10-751-736-10541
; Sequence 10541, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; FILE REFERENCE: AML00927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
```

NUMBER OF SEQ ID NOS: 54873  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 10541  
LENGTH: 21  
TYPE: RNA  
ORGANISM: RNAi  
US-10-751-736-10541

Query Match  
Best Local Similarity 0.1%; Score 16; DB 1; Length 21;  
Matches 10; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 178 TGCTGCTGCTGCTGCT 193  
DB 1 UGCGUCGUCGUCGUCU 16

RESULT 845  
US-10-719-900-249750/c  
Sequence 249750, Application US/10719900  
Publication No. US20050026164A1  
GENERAL INFORMATION:  
APPLICANT: Xue Wei Zhou  
TITLE OF INVENTION: Methods of Genetic Analysis of Mouse  
FILE REFERENCE: 3528.1  
CURRENT APPLICATION NUMBER: US/10/719,900  
PRIOR FILING DATE: 2003-11-20  
PRIOR APPLICATION NUMBER: 60/427,808  
NUMBER OF SEQ ID NOS: 982914  
SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1  
SEQ ID NO 249750  
LENGTH: 25  
TYPE: DNA  
ORGANISM: Mus musculus  
US-10-719-900-249750

Query Match  
Best Local Similarity 0.1%; Score 16; DB 1; Length 25;  
Matches 19; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 10892 CCTGGAAGCTCTCTCAGTGCAGT 10915  
DB 24 CCTGGAAGCTCTCAGTGCAGT 1

RESULT 846  
US-09-891-053-19/c  
Sequence 19, Application US/09891053  
Publication No. US20020086355A1  
GENERAL INFORMATION:  
APPLICANT: Itadani, Hironu  
APPLICANT: Takimura, Tetsuo  
APPLICANT: Nakamura, Takao  
APPLICANT: Kobayashi, Masahiko  
APPLICANT: Tanaka, Ken-ichi  
APPLICANT: Hidaka, Yusuke  
TITLE OF INVENTION: NOVEL GUANOSINE TRIPHOSPHATE (GTP)  
FILE REFERENCE: 06501-083001  
CURRENT APPLICATION NUMBER: US/09/891,053  
PRIOR FILING DATE: 2001-09-17  
PRIOR APPLICATION NUMBER: PCT/JP99/07280  
PRIOR FILING DATE: 1999-12-24  
PRIOR APPLICATION NUMBER: PCT/JP98/05967  
PRIOR FILING DATE: 1998-12-25  
PRIOR APPLICATION NUMBER: JP 11/145661  
PRIOR FILING DATE: 1999-05-25  
NUMBER OF SEQ ID NOS: 26  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 19  
LENGTH: 19

TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: artificially synthesized primer sequence  
US-09-891-053-19

Query Match  
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 19;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 588 CTGAACATCAAGAGGCGCA 606  
DB 19 CTGAACATCAAGAGGCGCA 1

RESULT 847  
US-10-232-187-12  
Sequence 12, Application US/10232187  
Publication No. US20030092091A1  
GENERAL INFORMATION:  
APPLICANT: Abrahamson, Julie A.  
APPLICANT: Bochner, Bruce  
APPLICANT: Erickson-Miller, Connie L.  
APPLICANT: Kikly, Kristine K.  
APPLICANT: Schleimer, Robert  
TITLE OF INVENTION: Sialoadhesin Factor-2 Antibodies  
FILE REFERENCE: GH50042-1  
CURRENT APPLICATION NUMBER: US/10/232,187  
PRIOR FILING DATE: 2002-08-29  
PRIOR APPLICATION NUMBER: 60/187,595  
PRIOR FILING DATE: 2000-03-07  
PRIOR APPLICATION NUMBER: PCT/US01/07193  
PRIOR FILING DATE: 2001-03-05  
PRIOR APPLICATION NUMBER: 60/315,943  
PRIOR FILING DATE: 2001-08-30  
PRIOR APPLICATION NUMBER: 60/349,830  
PRIOR FILING DATE: 2002-01-18  
PRIOR APPLICATION NUMBER: 60/394,741  
PRIOR FILING DATE: 2002-07-10  
NUMBER OF SEQ ID NOS: 14  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 12  
LENGTH: 19  
TYPE: DNA  
ORGANISM: Homo sapien  
US-10-232-187-12

Query Match  
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 19;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2391 ATGCTCAGTGTGGAAGC 2409  
DB 1 ATGCTCAGTGTGGAAGC 19

RESULT 848  
US-10-251-117-693  
Sequence 693, Application US/10251117  
Publication No. US20030170891A1  
GENERAL INFORMATION:  
APPLICANT: Ribozyne Pharmaceuticals, Inc.  
APPLICANT: MCSwigen, James  
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Epidermal Growth Factor Receptor  
FILE REFERENCE: 900/042 (MHB02-468-A)  
CURRENT APPLICATION NUMBER: US/10/251,117  
PRIOR FILING DATE: 2003-02-24  
PRIOR APPLICATION NUMBER: US 60/393,924  
PRIOR FILING DATE: 2002-07-03  
PRIOR APPLICATION NUMBER: US 10/163,552  
PRIOR FILING DATE: 2002-06-06

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; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; NUMBER OF SEQ ID NOS: 1213
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO: 693
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/siNA sense
US-10-251-117-693

```

```

Query Match          0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 68.4%; Pred. No. 5.1e+02;
Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

```

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QY      4751 CCTCTCCTCACCCTGCACC 4769
Db      1 CAUCGCCUCACACUCCACC 19

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RESULT 849
US-10-251-117-1000/c
; Sequence 1000, Application US/10251117
; Publication No. US20030170891A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Epidermal Growth Factor R
; FILE REFERENCE: 900/042 (MBHB02-468-A)
; CURRENT APPLICATION NUMBER: US/10/251,117
; PRIOR FILING DATE: 2003-02-24
; PRIOR APPLICATION NUMBER: US 60/393,924
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; NUMBER OF SEQ ID NOS: 1213
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO: 1000
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-251-117-1000

```

```

Query Match          0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      4751 CCTCTCCTCACCCTGCACC 4769
Db      19 CATCTGCTCACCCTGCACC 1

```

```

RESULT 850
US-10-940-500-30/c
; Sequence 30, Application US/10940500
; Publication No. US20050020531A1
; GENERAL INFORMATION:
; APPLICANT: Nezu, Jun-ichi
; APPLICANT: Ose, Aetaka

```

```

; TITLE OF INVENTION: SYSTEMIC CARBONITE DEFICIENCY GENE AND USES THEREOF
; FILE REFERENCE: 06501-073001
; CURRENT APPLICATION NUMBER: US/10/940,500
; PRIOR FILING DATE: 2004-09-13
; PRIOR APPLICATION NUMBER: US/09/798,743
; PRIOR FILING DATE: 2001-03-02
; PRIOR APPLICATION NUMBER: PCT/JP99/04853
; PRIOR FILING DATE: 1999-09-07
; PRIOR APPLICATION NUMBER: JP 10-252683
; PRIOR FILING DATE: 1998-09-07
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 30
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Artificially
US-10-940-500-30

```

```

Query Match          0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      347 CACCAGATCACTGCAG 365
Db      19 CACCAGTTCCTCCTGCAG 1

```

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RESULT 851
US-10-759-463-19/c
; Sequence 19, Application US/10759463
; Publication No. US20050048522A1
; GENERAL INFORMATION:
; APPLICANT: Itadani, Hiraoku
; APPLICANT: Takimura, Tetsuo
; APPLICANT: Nakamura, Takao
; APPLICANT: Kobayashi, Masahiko
; APPLICANT: Tanaka, Ken-ichi
; APPLICANT: Hidaka, Yuseki
; APPLICANT: Ohta, Masataka
; TITLE OF INVENTION: NOVEL GUANOSINE TRIPHOSPHATE (GTP)
; FILE REFERENCE: 06501-083001
; CURRENT APPLICATION NUMBER: US/10/759,463
; PRIOR FILING DATE: 2004-07-16
; PRIOR APPLICATION NUMBER: US/09/891,053
; PRIOR FILING DATE: 2001-06-25
; PRIOR APPLICATION NUMBER: PCT/JP99/07280
; PRIOR FILING DATE: 1999-12-24
; PRIOR APPLICATION NUMBER: PCT/JP98/05967
; PRIOR FILING DATE: 1998-12-25
; PRIOR APPLICATION NUMBER: JP 11/145661
; PRIOR FILING DATE: 1998-05-25
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 19
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: artificially synthesized primer sequence
US-10-759-463-19

```

```

Query Match          0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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```

QY      588 CTGAACATCAAGAGGCGCA 606
Db      19 CTGAACATCAAGAGGCGCA 1

```

```
RESULT 852
US-10-893-010-187/c
; Sequence 187, Application US/10893010
; Publication No. US20050164224A1
; GENERAL INFORMATION:
; APPLICANT: Sinna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; APPLICANT: Thompson, James
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Cyclin D1 Gene Expression
; TITLE OF INVENTION: Using Short Interfering Nucleic Acid (siNA)
; FILE REFERENCE: 400/170 (MBHB02-1005-C)
; CURRENT FILING DATE: 2004-07-16
; PRIOR APPLICATION NUMBER: US/10/893,010
; PRIOR FILING DATE: 2003-02-06
; PRIOR APPLICATION NUMBER: PCT/US 03/03662
; PRIOR FILING DATE: 2002-09-17
; PRIOR APPLICATION NUMBER: US 60/411,275
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-03
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 526
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 187
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-893-010-187
Query Match 0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1083 CCAAGCAGCGCCGAGCTG 1101
DB 19 CCAAGCAGCGCAGAACCTG 1

RESULT 853
US-10-893-010-426
; Sequence 426, Application US/10893010
; Publication No. US20050164224A1
; GENERAL INFORMATION:
; APPLICANT: Sinna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; APPLICANT: Thompson, James
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Cyclin D1 Gene Expression
; TITLE OF INVENTION: Using Short Interfering Nucleic Acid (siNA)
; FILE REFERENCE: 400/170 (MBHB02-1005-C)
; CURRENT FILING DATE: 2004-07-16
; PRIOR APPLICATION NUMBER: US/10/893,010
; PRIOR FILING DATE: 2003-02-06
; PRIOR APPLICATION NUMBER: PCT/US 03/03662
; PRIOR FILING DATE: 2002-09-17
; PRIOR APPLICATION NUMBER: US 60/411,275
```

```
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-03
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 526
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 426
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-893-010-426
Query Match 0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 5.1e+02;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1083 CCAAGCAGCGCCGAGCTG 1101
DB 1 CCAAGCAGCGCAGAACCTG 19

RESULT 854
US-10-923-329-8
; Sequence 8, Application US/10923329
; Publication No. US20050164968A1
; GENERAL INFORMATION:
; APPLICANT: Sinna Therapeutics, Inc.
; APPLICANT: Richards, Ivan
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA interference Mediated Inhibition of ADAM33 Gene Expression
; TITLE OF INVENTION: Using Short Interfering Nucleic Acid (siNA)
; FILE REFERENCE: 400/225 (MBHB04-672)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,329
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: PCT/US04/13456
; PRIOR FILING DATE: 2004-02-13
; PRIOR APPLICATION NUMBER: US 10/780,447
; PRIOR FILING DATE: 2004-02-13
; PRIOR APPLICATION NUMBER: US 60/292,217
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/362,016
; PRIOR FILING DATE: 2002-03-06
; PRIOR APPLICATION NUMBER: US 60/363,883
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 60/311,865
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: US 10/727,780
; PRIOR FILING DATE: 2003-12-03
; PRIOR APPLICATION NUMBER: US 60/543,480
; PRIOR FILING DATE: 2004-02-10
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 514
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
```



```

; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-329-8

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 19;
Matches 11; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTG 194
Db 1 GCTGCTGCTGCTGCTG 19

RESULT 855
US-10-923-329-158
; Sequence 158, Application US/10923329
; Publication No. US20050164968A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Richards, Ivan
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of ADAM33 Gene Expression
; FILE REFERENCE: 400/225 (MBHB04-672)
; CURRENT APPLICATION NUMBER: US/10/923,329
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/13456
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US 10/780,447
; PRIOR FILING DATE: 2004-02-13
; PRIOR APPLICATION NUMBER: US 60/362,016
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/362,016
; PRIOR FILING DATE: 2002-03-06
; PRIOR APPLICATION NUMBER: US 60/363,883
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 60/311,865
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: US 10/727,780
; PRIOR FILING DATE: 2003-12-03
; PRIOR APPLICATION NUMBER: US 60/543,480
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 514
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 158
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-329-158

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 19;
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 524 GCTGCTGCTGCTGCTG 542
Db 1 GCTGCTGCTGCTGCTG 19

RESULT 856
US-10-923-329-204/C
; Sequence 204, Application US/10923329
; Publication No. US20050164968A1
```

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; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Richards, Ivan
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of ADAM33 Gene Expression
; FILE REFERENCE: 400/225 (MBHB04-672)
; CURRENT APPLICATION NUMBER: US/10/923,329
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/13456
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US 10/780,447
; PRIOR FILING DATE: 2004-02-13
; PRIOR APPLICATION NUMBER: US 60/362,016
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/363,883
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 60/311,865
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: US 10/727,780
; PRIOR FILING DATE: 2003-12-03
; PRIOR APPLICATION NUMBER: US 60/543,480
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 514
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 204
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-329-204

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 19;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 176 GCTGCTGCTGCTGCTG 194
Db 19 GCTGCTGCTGCTGCTG 1

RESULT 857
US-10-923-329-354/C
; Sequence 354, Application US/10923329
; Publication No. US20050164968A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Richards, Ivan
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of ADAM33 Gene Expression
; FILE REFERENCE: 400/225 (MBHB04-672)
; CURRENT APPLICATION NUMBER: US/10/923,329
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/13456
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US 10/780,447
; PRIOR FILING DATE: 2004-02-13
; PRIOR APPLICATION NUMBER: US 60/362,016
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/363,883
```

```
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense region
US-10-923-354-639
Query Match      0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      524 GCTGCGCATTCAGAGG 542
Db      19 GCTGCGCATTCAGAGG 1

RESULT 858
US-10-923-354-639
; Sequence 639, Application US/10923354
; Publication No. US20050176024A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; APPLICANT: Pavco, Pamela
; APPLICANT: Fossnaugh, Kathy
; APPLICANT: Jamison, Sharon
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Epidermal Growth Factor
; FILE REFERENCE: 400/168 (MBHB02-468-B)
; CURRENT APPLICATION NUMBER: US/10/923,354
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/05045
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 10/251,117
; PRIOR FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: US 60/393,924
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 10/163,522
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 10/277,494
; PRIOR FILING DATE: 2002-10-21
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 10/742,270
; PRIOR FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US 02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-05-24
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1263
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 639
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

```
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense region
US-10-923-354-639
Query Match      0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY      4751 CCTCTCCCTCAGCTCCACC 4769
Db      1 CAUCGCTCAGCTCCACC 19

RESULT 859
US-10-923-354-946/c
; Sequence 946, Application US/10923354
; Publication No. US20050176024A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; APPLICANT: Pavco, Pamela
; APPLICANT: Fossnaugh, Kathy
; APPLICANT: Jamison, Sharon
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Epidermal Growth Factor
; FILE REFERENCE: 400/168 (MBHB02-468-B)
; CURRENT APPLICATION NUMBER: US/10/923,354
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/05045
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 10/251,117
; PRIOR FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: US 60/393,924
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 10/163,522
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 10/277,494
; PRIOR FILING DATE: 2002-10-21
; PRIOR APPLICATION NUMBER: US 09/916,466
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 10/742,270
; PRIOR FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US 02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-05-24
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1263
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 946
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-354-946
Query Match      0.1%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      4751 CCTCTCCCTCAGCTCCACC 4769
Db      19 CATCTGCTCAGCTCCACC 1

RESULT 860
US-09-861-893-15
; Sequence 15, Application US/09861893
; Patent No. US20020045257A1
; GENERAL INFORMATION:
```

```

; APPLICANT: Feinberg, Andrew
; APPLICANT: Strichman-Almashanu, Liora
; APPLICANT: Jiang, Shan
; TITLE OF INVENTION: METHODS FOR ASSAYING GENE IMPRINTING AND
; FILE REFERENCE: 01107.00128
; CURRENT APPLICATION NUMBER: US/09/861,893
; PRIOR FILING DATE: 2001-05-22
; PRIOR APPLICATION NUMBER: 60/206,158
; PRIOR FILING DATE: 2000-05-22
; PRIOR APPLICATION NUMBER: 60/206,161
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: PaatSeq for Windows Version 3.0
; SEQ ID NO 15
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-861-893-15

```

```

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      176 GCTGCTGCTGCTGCTGCTG 194
          |||||
DB      2 GCTGCTGCTGCTGCTGCTG 20

```

```

RESULT 861
US-09-800-629A-81
; Sequence 81, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 81
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-81

```

```

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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```

QY      3663 AACACAGCAGCCATGTAG 3681
          |||||
DB      1 AACACAGCAGCCATGTAG 19

```

```

RESULT 862
US-09-953-318-64
; Sequence 64, Application US/09953318
; Publication No. US20030105036A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Andrew T. Walc

```

```

; TITLE OF INVENTION: ANTISENSE MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPT
; FILE REFERENCE: RTS-0232
; CURRENT APPLICATION NUMBER: US/09/953,318
; PRIOR FILING DATE: 2001-09-13
; NUMBER OF SEQ ID NOS: 154
; SEQ ID NO 64
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-953-318-64

```

```

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      2271 GTCAACAAGCTTGTACT 2289
          |||||
DB      1 GTCAACAAGCTTGTACT 19

```

```

RESULT 863
US-10-149-352-4/C
; Sequence 4, Application US/10149352
; Publication No. US20030105050A1
; GENERAL INFORMATION:
; APPLICANT: Beil, Rajinder
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES
; FILE REFERENCE: 06275-254US1
; CURRENT APPLICATION NUMBER: US/10/149,352
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/GB00/04741
; PRIOR FILING DATE: 2000-12-12
; PRIOR APPLICATION NUMBER: GB 9929487.8
; PRIOR FILING DATE: 1999-12-15
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 4.0
; SEQ ID NO 4
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Antisense oligonucleotide
US-10-149-352-4

```

```

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

QY      153 CTGGCGCTGCTGGCGCTGC 171
          |||||
DB      19 CTGGCGCTGCTGGCGCTGC 1

```

```

RESULT 864
US-10-032-585-4667
; Sequence 4667, Application US/10032585
; Publication No. US20030180953A1
; GENERAL INFORMATION:
; APPLICANT: Terry, Roemer D.
; APPLICANT: Bo, Jiang
; APPLICANT: Charles, Boone
; APPLICANT: Howard, Bussey
; TITLE OF INVENTION: Gene Disruption Methodologies for Drug Target Discovery
; FILE REFERENCE: 10182-005-999
; CURRENT APPLICATION NUMBER: US/10/032,585
; PRIOR FILING DATE: 2001-12-20
; NUMBER OF SEQ ID NOS: 8000
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4667
; LENGTH: 20

```

TYPE: DNA  
ORGANISM: Candida albicans  
US-10-032-585-4667

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 5.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 194  
DB 2 GCTGCTGCTGCTGCTG 20

RESULT 865  
US-10-446-373-64  
Sequence 64, Application US/10446373  
Publication No. US20030204076A1  
GENERAL INFORMATION:  
APPLICANT: C. Frank Bennett  
APPLICANT: Andrew T. Watt  
TITLE OF INVENTION: ANTISENSE MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPT  
FILE REFERENCE: RTS-0232  
CURRENT APPLICATION NUMBER: US/10/446,373  
CURRENT FILING DATE: 2003-05-28  
PRIOR APPLICATION NUMBER: US/09/953,318  
PRIOR FILING DATE: 2001-09-13  
NUMBER OF SEQ ID NOS: 154  
SEQ ID NO 64  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-446-373-64

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 5.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2271 GTCACAAAGCTTGTACT 2289  
DB 1 GTCATCAGAGCTTGTACT 19

RESULT 866  
US-10-181-543-18/C  
Sequence 18, Application US/10181543  
Publication No. US20030211608A1  
GENERAL INFORMATION:  
APPLICANT: Isis Pharmaceuticals, Inc.  
APPLICANT: Madeline M. Butler  
APPLICANT: Robert McKay  
APPLICANT: Brett P. Monia  
APPLICANT: Jacqueline Wyatt  
TITLE OF INVENTION: ANTISENSE MODULATION OF GLYCOGEN SYNTHASE KINASE 3 BETA EXPRESSION  
FILE REFERENCE: RTS-0339  
CURRENT APPLICATION NUMBER: US/10/181,543  
CURRENT FILING DATE: 2002-07-18  
PRIOR APPLICATION NUMBER: 09/489,765  
PRIOR FILING DATE: 2000-01-19  
NUMBER OF SEQ ID NOS: 85  
SEQ ID NO 18  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-181-543-18

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 5.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4246 ACAGGTGGCAACACCAG 4264  
DB 20 ACAGGTGGCAACTCCTG 2

RESULT 867  
US-10-304-107-69  
Sequence 69, Application US/10304107  
Publication No. US20040101855A1  
GENERAL INFORMATION:  
APPLICANT: C. Frank Bennett  
APPLICANT: Kenneth W. Doble  
TITLE OF INVENTION: MODULATION OF PPAR BINDING PROTEIN EXPRESSION  
FILE REFERENCE: RTS-0433  
CURRENT APPLICATION NUMBER: US/10/304,107  
CURRENT FILING DATE: 2002-11-22  
NUMBER OF SEQ ID NOS: 148  
SEQ ID NO 69  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-304-107-69

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 5.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2467 TGGGAGAGGAGCTTGTGTT 2485  
DB 2 TGGGAGAGGAGCTTGTGTT 20

RESULT 868  
US-10-318-819A-84/C  
Sequence 84, Application US/1031819A  
Publication No. US20040115645A1  
GENERAL INFORMATION:  
APPLICANT: C. Frank Bennett  
APPLICANT: Kenneth W. Doble  
TITLE OF INVENTION: MODULATION OF DRK2 EXPRESSION  
FILE REFERENCE: PTS-0069  
CURRENT APPLICATION NUMBER: US/10/318,819A  
CURRENT FILING DATE: 2002-12-12  
NUMBER OF SEQ ID NOS: 133  
SEQ ID NO 84  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-318-819A-84

Query Match 0.1%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 5.5e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2658 TTACAGTTGCAATATCTT 2676  
DB 20 TTACAGTTGCAATATCTT 2

RESULT 869  
US-10-679-532-81  
Sequence 81, Application US/10679532  
Publication No. US20040121376A1  
GENERAL INFORMATION:  
APPLICANT: Dean, Nicholas M.  
APPLICANT: Kairas, James G.  
APPLICANT: McKay, Robert  
APPLICANT: Manoharan, Muthiah

```
;; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL.
;; FILE REFERENCE: TRANSDUCTION
;; CURRENT APPLICATION NUMBER: US/10/679,532
;; PRIOR FILING DATE: 2003-10-06
;; PRIOR APPLICATION NUMBER: US/09/800,629A
;; PRIOR FILING DATE: 2001-03-07
;; PRIOR APPLICATION NUMBER: PCT/US00/07318
;; PRIOR FILING DATE: 2000-03-17
;; PRIOR APPLICATION NUMBER: 09/280,799
;; PRIOR FILING DATE: 1999-03-26
;; NUMBER OF SEQ ID NOS: 210
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO: 81
;; LENGTH: 20
;; TYPE: DNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-679-532-81
```

```
Query Match          0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

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QY      3663 AACACAGCACCAATGTCG 3681
DB      1 AACACAGCACCAATGTCG 19
```

```
RESULT 870
US-10-641-455A-226
; Sequence 226, Application US/10641455A
; Publication No. US20040171566A1
; GENERAL INFORMATION:
; APPLICANT: Monia, Brett P.
; APPLICANT: Gaarde, William A.
; APPLICANT: Nero, Pamela S.
; APPLICANT: McKay, Robert
; APPLICANT: Popoff, Ian
; APPLICANT: Wong, Mai Shu Fred
; TITLE OF INVENTION: Antisense Oligonucleotide Modulation of p38 Mitogen
; FILE REFERENCE: ISPH-0762
; CURRENT APPLICATION NUMBER: US/10/641,455A
; CURRENT FILING DATE: 2003-08-15
; PRIOR APPLICATION NUMBER: US 10/238,442
; PRIOR FILING DATE: 2002-09-09
; PRIOR APPLICATION NUMBER: US 09/640,101
; PRIOR FILING DATE: 2000-08-15
; PRIOR APPLICATION NUMBER: US 09/286,904
; PRIOR FILING DATE: 1999-04-06
; NUMBER OF SEQ ID NOS: 266
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 226
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-641-455A-226
```

```
Query Match          0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      3827 AATGAGCTCATGCTTACG 3845
DB      1 AATGAGCTCATGCTTACG 19
```

```
RESULT 871
US-10-497-846-26
```

```
;; Sequence 26, Application US/10497846
;; Publication No. US2005008988A1
;; GENERAL INFORMATION:
;; APPLICANT: Calderwood, Stephen B.
;; APPLICANT: Choi, Ji Young
;; APPLICANT: Siferi, Costi D.
;; APPLICANT: Goumnerov, Boyan C.
;; APPLICANT: Rahme, Laurence G.
;; APPLICANT: Ausubel, Frederick M.
;; TITLE OF INVENTION: PSEUDOMONAS VIRULENCE FACTORS AND USES
;; FILE REFERENCE: 00786/415002
;; CURRENT APPLICATION NUMBER: US/10/497,846
;; CURRENT FILING DATE: 2004-06-04
;; PRIOR APPLICATION NUMBER: PCT/US03/00184
;; PRIOR FILING DATE: 2003-01-03
;; PRIOR APPLICATION NUMBER: US 60/345,287
;; PRIOR FILING DATE: 2002-01-04
;; NUMBER OF SEQ ID NOS: 34
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO: 26
;; LENGTH: 20
;; TYPE: DNA
;; ORGANISM: Pseudomonas aeruginosa
US-10-497-846-26
```

```
Query Match          0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1343 CCTTGTATGATGATGTC 1361
DB      2 CCTTGTATGATGATGTC 20
```

```
RESULT 872
US-10-831-901A-29272/c
; Sequence 29272, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Becker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freiler, Susan M.
; APPLICANT: Massiere, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sammes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL0008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 29272
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29272

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.Se+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      628 CCCGAGACGACGAGAGC 646
Db      19 CCGGAGACGACGAGAGC 1

RESULT 873
US-10-831-901A-29273/C
; Sequence 29273, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massie, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
; FILE REFERENCE: ISIS0083-100 (BIOL0008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29273
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29273

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.Se+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      628 CCCGAGACGACGAGAGC 646
Db      20 CCGGAGACGACGAGAGC 2

RESULT 874
US-10-296-263-15
; Sequence 15, Application US/10296263
; Publication No. US20050155440A1
; GENERAL INFORMATION:
; APPLICANT: Feinberg, Andrew
; APPLICANT: Strichman-Almashanu, Liora
; APPLICANT: Jiang, Shan
; TITLE OF INVENTION: METHODS FOR ASSAYING GENE IMPRINTING AND
```

```
; TITLE OF INVENTION: METHYLATED CpG ISLANDS
; FILE REFERENCE: 01107,00128
; CURRENT APPLICATION NUMBER: US/10/296,263
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: 60/206,158
; PRIOR FILING DATE: 2000-05-22
; PRIOR APPLICATION NUMBER: 60/206,161
; PRIOR FILING DATE: 2000-05-22
; NUMBER OF SEQ ID NOS: 77
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 15
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-296-263-15

Query Match      0.1%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 5.Se+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      176 GCTGCTGCTGCTGCTGCTG 194
Db      2 GCTGCTGCTGCTGCTGCTG 20

RESULT 875
US-10-418-182-132/C
; Sequence 132, Application US/10418182
; Publication No. US20030228302A1
; GENERAL INFORMATION:
; APPLICANT: Crea, Roberto
; TITLE OF INVENTION: UNIVERSAL LIBRARIES FOR IMMUNOGLOBULINS
; FILE REFERENCE: 1551,2001-001
; CURRENT APPLICATION NUMBER: US/10/418,182
; CURRENT FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: 60/373,558
; PRIOR FILING DATE: 2002-04-17
; NUMBER OF SEQ ID NOS: 423
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 132
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-418-182-132

Query Match      0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 5.Se+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      176 GCTGCTGCTGCTGCTGCTG 194
Db      19 GTTGCTGCTGCTGCTGCTG 1

RESULT 876
US-10-312-184A-20/C
; Sequence 20, Application US/10312184A
; Publication No. US20040038236A1
; GENERAL INFORMATION:
; APPLICANT: Bionomics Limited
; APPLICANT: Wallace, Robyn H
; APPLICANT: Mulley, John C
; APPLICANT: Berkovic, Samuel F
; APPLICANT: Harkin, Louise A
; APPLICANT: Dibbens, Leanne M
; TITLE OF INVENTION: MUTATION ASSOCIATED WITH EPILEPSY
; FILE REFERENCE: 1386/10
; CURRENT APPLICATION NUMBER: US/10/312,184A
; CURRENT FILING DATE: 2002-12-20
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn version 3.2
```

SEQ ID NO 20  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-312-184A-20

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 5.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 4450 AAAAAGCTTGAACCAACCC 4468  
Db 19 AAAAGCTTGAACCAACCC 1

RESULT 877  
US-10-680-341-70/c  
Sequence 70, Application US/10680341  
Publication No. US2004009123A1  
GENERAL INFORMATION:

APPLICANT: Reyes, Antonio A.  
APPLICANT: Wallace, Robert B.  
APPLICANT: Ugozzoli, Luis A.  
TITLE OF INVENTION: Linked Linear Amplification of Nucleic Acids  
FILE REFERENCE: 3239-0105P  
CURRENT APPLICATION NUMBER: US/10/680,341  
CURRENT FILING DATE: 2003-10-06  
NUMBER OF SEQ ID NOS: 83  
SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 70  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (21)  
OTHER INFORMATION: "NON-REPLICABLE ELEMENT"-ACG

US-10-680-341-70

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 5.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2832 AACACCACTCTTCACG 2850  
Db 21 ACCACCACTTCATCCACG 3

RESULT 878  
US-10-786-720-11467  
Sequence 11467, Application US/10786720  
Publication No. US2004019181A1  
GENERAL INFORMATION:

APPLICANT: Wyeth  
APPLICANT: O'Toole, Margot  
APPLICANT: Liu, Wei  
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING AUTOIMMUNE  
FILE REFERENCE: 031896-023000 (AM101331L)  
CURRENT APPLICATION NUMBER: US/10/786,720  
CURRENT FILING DATE: 2004-02-26  
NUMBER OF SEQ ID NOS: 21135  
SOFTWARE: PatentIn version 3.2

SEQ ID NO 11467  
LENGTH: 21  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-786-720-11467

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 5.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2826 CAGATGAACCACTTCT 2844  
Db 1 CAGCTGAACCACTTCT 19

RESULT 879  
US-10-751-736-1980  
Sequence 1980, Application US/10751736  
Publication No. US20040265230A1  
GENERAL INFORMATION:

APPLICANT: Wyeth  
APPLICANT: Martinez, Robert  
APPLICANT: Brown, Eugene  
APPLICANT: Liu, Wei  
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
FILE REFERENCE: AM100927 (031896-002000)  
CURRENT APPLICATION NUMBER: US/10/751,736  
CURRENT FILING DATE: 2003-01-06  
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
NUMBER OF SEQ ID NOS: 54873  
SOFTWARE: PatentIn version 3.2

SEQ ID NO 1980  
LENGTH: 21  
TYPE: RNA  
ORGANISM: RNAi  
US-10-751-736-1980

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 68.4%; Pred. No. 5.8e+02;  
Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 4880 TAACAAGATGATATGACC 4898  
Db 2 UAAACAGAGUAGAUAGACC 20

RESULT 880  
US-10-751-736-2106/c  
Sequence 2106, Application US/10751736  
Publication No. US20040265230A1  
GENERAL INFORMATION:

APPLICANT: Wyeth  
APPLICANT: Martinez, Robert  
APPLICANT: Brown, Eugene  
APPLICANT: Liu, Wei  
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
FILE REFERENCE: AM100927 (031896-002000)  
CURRENT APPLICATION NUMBER: US/10/751,736  
CURRENT FILING DATE: 2003-01-06  
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
NUMBER OF SEQ ID NOS: 54873  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 2106  
LENGTH: 21  
TYPE: RNA  
ORGANISM: RNAi  
US-10-751-736-2106

Query Match 0.1%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 5.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3630 CATTATGATGAAGAGAGA 3648  
Db 20 CATTAAGATGAAGAGAGA 2

RESULT 881  
US-10-751-736-8809

```
; Sequence 8809, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8809
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-8809

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 175 CGCTGCTGCTGCTGCTGCT 193
DB 1 CACTGCTGCTGCTGCTGCT 19

RESULT 882
US-10-751-736-11485
; Sequence 11485, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11485
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-11485

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 3 GCTGCTGCTGCTGCTGATG 21

RESULT 883
US-10-751-736-11486
; Sequence 11486, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
```

```
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11486
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNAI
US-10-751-736-11486

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 21;
Matches 12; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTGCTG 194
DB 1 GCUGCUGCCGCTGCTGCTG 19

RESULT 884
US-10-751-736-26929
; Sequence 26929, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 26929
; LENGTH: 21
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-751-736-26929

Query Match
Best Local Similarity 0.1%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 450 GAGGCGAAGCCTTGCTGA 468
DB 3 GAGTCCAAAGCCTTGCTGA 21

RESULT 885
US-10-751-736-26930
; Sequence 26930, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
```



```
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 26930
LENGTH: 21
TYPE: RNA
ORGANISM: RNAi
US-10-751-736-26930
```

```
Query Match
Best Local Similarity 73.7%; Score 15.8; DB 1; Length 21;
Matches 14; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 450 GAGGCGCAAGCCTTGCTGA 468
DB 1 GAGUCCAAAGCCUUCUGA 19
```

```
RESULT 886
US-10-751-736-29941
Sequence 29941, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
FILE REFERENCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 29941
LENGTH: 21
TYPE: DNA
ORGANISM: homo sapiens
US-10-751-736-29941
```

```
Query Match
Best Local Similarity 89.5%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 450 GAGGCGCAAGCCTTGCTGA 468
DB 1 GAGTCCAAAGCCTTGCTGA 19
```

```
RESULT 887
US-10-751-736-39220/C
Sequence 39220, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
FILE REFERENCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 39220
LENGTH: 21
TYPE: DNA
ORGANISM: homo sapiens
US-10-751-736-39220
```

```
Query Match
Best Local Similarity 89.5%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 176 GCTGCTGTGCTGCTGCTG 194
DB 19 GCTTACCTGCTGCTGCTG 1
```

```
RESULT 888
US-10-751-736-44169/C
Sequence 44169, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
FILE REFERENCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 44169
LENGTH: 21
TYPE: RNA
ORGANISM: RNAi
US-10-751-736-44169
```

```
Query Match
Best Local Similarity 89.5%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 994 AAGACACACCAAGATCAA 1012
DB 19 AGGACAAACCAAGATCAA 1
```

```
RESULT 889
US-10-751-736-44757/C
Sequence 44757, Application US/10751736
Publication No. US20040265230A1
GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Martinez, Robert
APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
FILE REFERENCE: AM100927 (031896-002000)
CURRENT FILING DATE: 2003-01-06
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
NUMBER OF SEQ ID NOS: 54873
SOFTWARE: PatentIn version 3.2
SEQ ID NO: 44757
LENGTH: 21
TYPE: RNA
ORGANISM: RNAi
US-10-751-736-44757
```

```
Query Match
Best Local Similarity 89.5%; Score 15.8; DB 1; Length 21;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 994 AAGACACCAAGATCAA 1012
DB 19 AGGACAAACCAAGATCAA 1
```

```
Db          20 AGGACAAACCAAGATCA 2

RESULT 890
US-10-751-736-49115/c
; Sequence 49115, Application US/10751736
; Publication No. US20040265230A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Martinez, Robert
; APPLICANT: Brown, Eugene
; APPLICANT: Liu, Wei
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON
; TITLE OF INVENTION: CANCERS
; FILE REFERENCE: AM100927 (031896-002000)
; CURRENT APPLICATION NUMBER: US/10/751,736
; CURRENT FILING DATE: 2003-01-06
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000
; PRIOR FILING DATE: 2003-01-06
; NUMBER OF SEQ ID NOS: 54873
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 49115
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNA1
US-10-751-736-49115

Query Match          0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY          480 AACCTGAGAGATTGCTG 498
Db          21 AACCTGTGAGATTGCTG 3

RESULT 891
US-10-847-918-8739/c
; Sequence 8739, Application US/10847918
; Publication No. US20050119210A1
; GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Stonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8739
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNA1-antisense strand
US-10-847-918-8739

Query Match          0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY          3640 AAGAGAAGATTGAATTGA 3658
Db          19 AAGAGAAGACTGAAGTTGA 1

RESULT 892
US-10-847-918-13601/c
; Sequence 13601, Application US/10847918
; Publication No. US20050119210A1

GENERAL INFORMATION:
; APPLICANT: Wyeth
; APPLICANT: Be, Xiaobing
; APPLICANT: Liu, Wei
; APPLICANT: Stonim, Donna
; APPLICANT: Howes, Steve
; TITLE OF INVENTION: Compositions and Methods for Diagnosing and Treating Cancers
; FILE REFERENCE: 031896-026000 (AM101264)
; CURRENT APPLICATION NUMBER: US/10/847,918
; CURRENT FILING DATE: 2004-05-19
; PRIOR APPLICATION NUMBER: US 60/471,729
; PRIOR FILING DATE: 2003-05-20
; NUMBER OF SEQ ID NOS: 14937
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 13601
; LENGTH: 21
; TYPE: RNA
; ORGANISM: RNA1-sense strand
US-10-847-918-13601

Query Match          0.1%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY          3735 AGCTTCATATGATGCTA 3753
Db          20 AGCTTCATATGATGATA 2

RESULT 893
US-09-818-875-403/c
; Sequence 403, Application US/09818875
; Publication No. US20030051270A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
; APPLICANT: Gamper, Howard B.
; APPLICANT: Rice, Michael C.
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
; TITLE OF INVENTION: Stranded Oligonucleotides
; FILE REFERENCE: Napro-4
; CURRENT APPLICATION NUMBER: US/09/818,875
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 60/192,176
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/192,179
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/208,538
; PRIOR FILING DATE: 2000-06-01
; PRIOR APPLICATION NUMBER: US 60/244,989
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 4385
; SOFTWARE: Friedmann macro Napro4
; SEQ ID NO 403
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-818-875-403

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY          2834 CACCACTTCTTCACG 2850
Db          17 CACCACTTCATCCAG 1

RESULT 894
US-09-818-875-404
; Sequence 404, Application US/09818875
; Publication No. US20030051270A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
```

```
APPLICANT: Gamper, Howard B.
APPLICANT: Rice, Michael C.
TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
FILE REFERENCE: Napro-4
CURRENT APPLICATION NUMBER: US/09/818,875
CURRENT FILING DATE: 2001-03-27
PRIOR APPLICATION NUMBER: US 60/192,176
PRIOR FILING DATE: 2000-03-27
PRIOR APPLICATION NUMBER: US 60/192,179
PRIOR FILING DATE: 2000-03-27
PRIOR APPLICATION NUMBER: US 60/208,538
PRIOR FILING DATE: 2000-06-01
PRIOR APPLICATION NUMBER: US 60/244,989
PRIOR FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 4385
SOFTWARE: Friedmann macro Napro4
SEQ ID NO 404
LENGTH: 17
TYPE: DNA
ORGANISM: Homo sapiens
US-09-818-875-404
```

```
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2834 CACCACTTCTTCACG 2850
      |||||
Db 1 CACCACTTCATCCACG 17
```

```
RESULT 895
US-09-848-754A-1403
Sequence 1403, Application US/09848754A
Publication No. US20030073207A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
FILE REFERENCE: MBHB00-958-1 (400/018)
CURRENT APPLICATION NUMBER: US/09/848,754A
CURRENT FILING DATE: 2001-05-03
NUMBER OF SEQ ID NOS: 9645
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1403
LENGTH: 17
TYPE: RNA
ORGANISM: Homo sapiens
US-09-848-754A-1403
```

```
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 4753 TCTCCTACCTCCACC 4769
      ||:||||:|
Db 1 UCUCCUCACCCUCCACC 17
```

```
RESULT 896
US-09-848-754A-2153
Sequence 2153, Application US/09848754A
Publication No. US20030073207A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
FILE REFERENCE: MBHB00-958-1 (400/018)
CURRENT APPLICATION NUMBER: US/09/848,754A
CURRENT FILING DATE: 2001-05-03
NUMBER OF SEQ ID NOS: 9645
SOFTWARE: PatentIn version 3.0
```

```
SEQ ID NO 2153
LENGTH: 17
TYPE: RNA
ORGANISM: Homo sapiens
US-09-848-754A-2153
```

```
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 148 CGCTGCTGGCGCTGCTG 164
      |||:|:|:|:|
Db 1 CGCUCUCGCGCUCUCUG 17
```

```
RESULT 897
US-09-848-754A-2154
Sequence 2154, Application US/09848754A
Publication No. US20030073207A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
FILE REFERENCE: MBHB00-958-1 (400/018)
CURRENT APPLICATION NUMBER: US/09/848,754A
CURRENT FILING DATE: 2001-05-03
NUMBER OF SEQ ID NOS: 9645
SOFTWARE: PatentIn version 3.0
SEQ ID NO 2154
LENGTH: 17
TYPE: RNA
ORGANISM: Homo sapiens
US-09-848-754A-2154
```

```
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 150 CTGCTGCGCTGCTGCGC 166
      |:|:|:|:|:|
Db 1 CUCCUCGCGCUCUCUGC 17
```

```
RESULT 898
US-09-848-754A-3102
Sequence 3102, Application US/09848754A
Publication No. US20030073207A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
FILE REFERENCE: MBHB00-958-1 (400/018)
CURRENT APPLICATION NUMBER: US/09/848,754A
CURRENT FILING DATE: 2001-05-03
NUMBER OF SEQ ID NOS: 9645
SOFTWARE: PatentIn version 3.0
SEQ ID NO 3102
LENGTH: 17
TYPE: RNA
ORGANISM: Homo sapiens
US-09-848-754A-3102
```

```
Query Match 0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 5e+02;
Matches 12; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 147 GCGCTGCGCGCTGCTGCT 163
      ||||:|:|:|:|
Db 1 GCGCUCUCGCGCUCUCU 17
```

```
RESULT 899
US-09-930-423-813
```

```
; Sequence 813, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 813
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-813

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 5e+02;
Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      164 GGGCGTCTGCTGCGCTGC 180
Db      1 GGGCGTCTGCTGCGCTGC 17

RESULT 900
US-09-792-818-383/C
; Sequence 383, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Inse
; TITLE OF INVENTION: (GRID) Gene
; FILE REFERENCE: MBH00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 383
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-383

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      179 GCTGCTGCTGCTGCTGC 195
Db      17 GCTGCTGCTGCTGCTGC 1

RESULT 901
US-09-745-237A-813
; Sequence 813, Application US/09745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: 400/007 (MBH00-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
```

```
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 813
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-813

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 5e+02;
Matches 13; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      164 GGGCGTCTGCTGCGCTGC 180
Db      1 GGGCGTCTGCTGCGCTGC 17

RESULT 902
US-10-209-787-403/C
; Sequence 403, Application US/10209787
; Publication No. US2003021377A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
; APPLICANT: Gamper, Howard B.
; APPLICANT: Rice, Michael C.
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
; TITLE OF INVENTION: Stranded Oligonucleotides
; FILE REFERENCE: Napro-4
; CURRENT APPLICATION NUMBER: US/10/209,787
; CURRENT FILING DATE: 2002-07-30
; PRIOR APPLICATION NUMBER: US 09/818,875
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 60/192,176
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/192,179
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/208,538
; PRIOR FILING DATE: 2000-06-01
; PRIOR APPLICATION NUMBER: US 60/244,989
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 4385
; SOFTWARE: Friedman macro Napro4
; SEQ ID NO 403
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-209-787-403

Query Match          0.1%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 5e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2834 CACCACTTCTTCACAG 2850
Db      17 CACCACTTCTTCACAG 1

RESULT 903
US-10-209-787-404
; Sequence 404, Application US/10209787
; Publication No. US2003021377A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
; APPLICANT: Gamper, Howard B.
; APPLICANT: Rice, Michael C.
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
; TITLE OF INVENTION: Stranded Oligonucleotides
; FILE REFERENCE: Napro-4
; CURRENT APPLICATION NUMBER: US/10/209,787
; CURRENT FILING DATE: 2002-07-30
; PRIOR APPLICATION NUMBER: US 09/818,875
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 60/192,176
; PRIOR FILING DATE: 2000-03-27
```

```

; PRIOR APPLICATION NUMBER: US 60/192,179
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/208,538
; PRIOR FILING DATE: 2000-06-01
; PRIOR APPLICATION NUMBER: US 60/244,989
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 4385
; SOFTWARE: Friedman macro Napro4
; SEQ ID NO 404
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-209-787-404
```

```

Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2834 CACCAACTTCTTCACG 2850
Db 1 CACCAACTTCATCCACG 17
```

```

RESULT 904
US-10-261-185-403/C
; Sequence 403, Application US/10261185
; Publication No. US20040014057A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
; APPLICANT: Gamper, Howard B.
; APPLICANT: Rice, Michael C.
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
; FILE REFERENCE: Stranded Oligonucleotides
; CURRENT APPLICATION NUMBER: US/10/261,185
; PRIOR FILING DATE: 2002-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/09761
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 60/192,176
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/192,179
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/208,538
; PRIOR FILING DATE: 2000-06-01
; PRIOR APPLICATION NUMBER: US 60/244,989
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 4385
; SOFTWARE: Friedman macro Napro4
; SEQ ID NO 403
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-261-185-403
```

```

Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2834 CACCAACTTCTTCACG 2850
Db 17 CACCAACTTCATCCACG 1
```

```

RESULT 905
US-10-261-185-404
; Sequence 404, Application US/10261185
; Publication No. US20040014057A1
; GENERAL INFORMATION:
; APPLICANT: Kmiec, Eric B.
; APPLICANT: Gamper, Howard B.
; APPLICANT: Rice, Michael C.
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
; FILE REFERENCE: Stranded Oligonucleotides
```

```

; FILE REFERENCE: Napro-4CON
; CURRENT APPLICATION NUMBER: US/10/261,185
; CURRENT FILING DATE: 2002-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/09761
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 60/192,176
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/192,179
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 60/208,538
; PRIOR FILING DATE: 2000-06-01
; PRIOR APPLICATION NUMBER: US 60/244,989
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 4385
; SOFTWARE: Friedman macro Napro4
; SEQ ID NO 404
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-261-185-404
```

```

Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2834 CACCAACTTCTTCACG 2850
Db 1 CACCAACTTCATCCACG 17
```

```

RESULT 906
US-10-712-672-2180/C
; Sequence 2180, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyne Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
; APPLICANT: McSwigen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2180
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-2180
```

```

Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 182 GCTGCTGCTGCTGGCGG 198
Db 17 GCTGCTGCTGCTGGCGG 1
```

```

RESULT 907
US-10-681-074-403/C
; Sequence 403, Application US/10681074
; Publication No. US20040175722A1
; GENERAL INFORMATION:
; APPLICANT: KmieC, ERIC B.
; APPLICANT: VAN BRABANT, ANJA
```

;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REDUCING SCREENING IN  
;; FILE REFERENCE: OLIGONUCLEOTIDE-DIRECTED NUCLEIC ACID SEQUENCE ALTERATION  
;; CURRENT APPLICATION NUMBER: US/10/681,074  
;; PRIOR FILING DATE: 2003-10-07  
;; PRIOR APPLICATION NUMBER: US 60/453,360  
;; PRIOR FILING DATE: 2003-03-07  
;; PRIOR APPLICATION NUMBER: US 60/416,983  
;; PRIOR FILING DATE: 2002-10-07  
;; NUMBER OF SEQ ID NOS: 4375  
;; SOFTWARE: PatentIn version 3.2  
;; SEQ ID NO 403  
;; LENGTH: 17  
;; TYPE: DNA  
;; ORGANISM: Homo sapiens  
US-10-681-074-403

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2834 CACCACTTCTTCACG 2850  
Db 17 CACCACTTCATCCACG 1

RESULT 908  
US-10-681-074-404  
;; Sequence 404, Application US/10681074  
;; Publication No. US20040175722A1  
;; GENERAL INFORMATION:  
;; APPLICANT: KMETEC, ERIC B.  
;; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REDUCING SCREENING IN  
;; FILE REFERENCE: NAPIO-18 US  
;; CURRENT APPLICATION NUMBER: US/10/681,074  
;; CURRENT FILING DATE: 2003-10-07  
;; PRIOR APPLICATION NUMBER: US 60/453,360  
;; PRIOR FILING DATE: 2003-03-07  
;; PRIOR APPLICATION NUMBER: US 60/416,983  
;; PRIOR FILING DATE: 2002-10-07  
;; NUMBER OF SEQ ID NOS: 4375  
;; SOFTWARE: PatentIn version 3.2  
;; SEQ ID NO 404  
;; LENGTH: 17  
;; TYPE: DNA  
;; ORGANISM: Homo sapiens  
US-10-681-074-404

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2834 CACCACTTCTTCACG 2850  
Db 1 CACCACTTCATCCACG 17

RESULT 909  
US-10-494-343-167/C  
;; Sequence 167, Application US/10494343  
;; Publication No. US20040248138A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Shannon, Mark  
;; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1  
;; FILE REFERENCE: PB0184  
;; CURRENT APPLICATION NUMBER: US/10/494,343  
;; CURRENT FILING DATE: 2004-04-30  
;; PRIOR APPLICATION NUMBER: US to be assigned  
;; PRIOR FILING DATE: to be assigned  
;; PRIOR APPLICATION NUMBER: PCT/US2002/035129

;; PRIOR FILING DATE: 2002-11-01  
;; PRIOR APPLICATION NUMBER: US 60/334,773  
;; PRIOR FILING DATE: 2001-11-01  
;; NUMBER OF SEQ ID NOS: 870  
;; SOFTWARE: Aeonica Sequence Listing Engine  
;; SEQ ID NO 167  
;; LENGTH: 17  
;; TYPE: DNA  
;; ORGANISM: Homo sapiens  
US-10-494-343-167

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GCTGCTGCTGCTGCTG 192  
Db 17 GCTGTTGCTGCTGCTG 1

RESULT 910  
US-10-494-343-168/C  
;; Sequence 168, Application US/10494343  
;; Publication No. US20040248138A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Shannon, Mark  
;; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1  
;; FILE REFERENCE: PB0184  
;; CURRENT APPLICATION NUMBER: US/10/494,343  
;; CURRENT FILING DATE: 2004-04-30  
;; PRIOR APPLICATION NUMBER: US to be assigned  
;; PRIOR FILING DATE: to be assigned  
;; PRIOR APPLICATION NUMBER: PCT/US2002/035129  
;; PRIOR FILING DATE: 2002-11-01  
;; PRIOR APPLICATION NUMBER: US 60/334,773  
;; PRIOR FILING DATE: 2001-11-01  
;; NUMBER OF SEQ ID NOS: 870  
;; SOFTWARE: Aeonica Sequence Listing Engine  
;; SEQ ID NO 168  
;; LENGTH: 17  
;; TYPE: DNA  
;; ORGANISM: Homo sapiens  
US-10-494-343-168

Query Match 0.1%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 5e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 178 TGCTGCTGCTGCTGCTG 194  
Db 17 TGCTGTTGCTGCTGCTG 1

RESULT 911  
US-10-494-343-169/C  
;; Sequence 169, Application US/10494343  
;; Publication No. US20040248138A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Shannon, Mark  
;; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1  
;; FILE REFERENCE: PB0184  
;; CURRENT APPLICATION NUMBER: US/10/494,343  
;; CURRENT FILING DATE: 2004-04-30  
;; PRIOR APPLICATION NUMBER: US to be assigned  
;; PRIOR FILING DATE: to be assigned  
;; PRIOR APPLICATION NUMBER: PCT/US2002/035129  
;; PRIOR FILING DATE: 2002-11-01  
;; PRIOR APPLICATION NUMBER: US 60/334,773  
;; PRIOR FILING DATE: 2001-11-01  
;; NUMBER OF SEQ ID NOS: 870  
;; SOFTWARE: Aeonica Sequence Listing Engine

```
; SEQ ID NO 169
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-494-343-169
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 177 CTGCTGCTGCTGCTGCT 193
DB 17 CTGCTGCTGCTGCTGCT 1
```

```
RESULT 912
US-10-494-343-170/c
; Sequence 170, Application US/10494343
; Publication No. US20040248138A1
; GENERAL INFORMATION:
; APPLICANT: Shannon, Mark
; APPLICANT: Phan, Thuywy
; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1
; FILE REFERENCE: PB0184
; CURRENT APPLICATION NUMBER: US/10/494,343
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US to be assigned
; PRIOR FILING DATE: to be assigned
; PRIOR APPLICATION NUMBER: PCT/US2002/035129
; PRIOR FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: US 60/334,773
; PRIOR FILING DATE: 2001-11-01
; NUMBER OF SEQ ID NOS: 870
; SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 170
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-494-343-170
```

Query Match

```
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 176 GCTGCTGCTGCTGCTGCT 192
DB 17 GCTGCTGCTGCTGCTGCT 1
```

```
RESULT 913
US-10-494-343-171/c
; Sequence 171, Application US/10494343
; Publication No. US20040248138A1
; GENERAL INFORMATION:
; APPLICANT: Shannon, Mark
; APPLICANT: Phan, Thuywy
; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1
; FILE REFERENCE: PB0184
; CURRENT APPLICATION NUMBER: US/10/494,343
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US to be assigned
; PRIOR FILING DATE: to be assigned
; PRIOR APPLICATION NUMBER: PCT/US2002/035129
; PRIOR FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: US 60/334,773
; PRIOR FILING DATE: 2001-11-01
; NUMBER OF SEQ ID NOS: 870
; SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 171
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-494-343-171
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 178 TGCTGCTGCTGCTGCTG 194
DB 17 TGCTGCTGCTGCTGCTG 1
```

```
RESULT 914
US-10-494-343-172/c
; Sequence 172, Application US/10494343
; Publication No. US20040248138A1
; GENERAL INFORMATION:
; APPLICANT: Shannon, Mark
; APPLICANT: Phan, Thuywy
; TITLE OF INVENTION: HUMAN AGIOMOTIN-LIKE PROTEIN 1
; FILE REFERENCE: PB0184
; CURRENT APPLICATION NUMBER: US/10/494,343
; PRIOR FILING DATE: 2004-04-30
; PRIOR APPLICATION NUMBER: US to be assigned
; PRIOR FILING DATE: to be assigned
; PRIOR APPLICATION NUMBER: PCT/US2002/035129
; PRIOR FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: US 60/334,773
; PRIOR FILING DATE: 2001-11-01
; NUMBER OF SEQ ID NOS: 870
; SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 172
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-494-343-172
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 177 CTGCTGCTGCTGCTGCT 193
DB 17 CTGCTGCTGCTGCTGCT 1
```

```
RESULT 915
US-10-317-444-385/c
; Sequence 385, Application US/10317444
; Publication No. US20030235837A1
; GENERAL INFORMATION:
; APPLICANT: Keim, Paul
; APPLICANT: Keys, Christine
; TITLE OF INVENTION: High resolution typing system for pathogenic E. coli
; FILE REFERENCE: NAU0200US
; CURRENT APPLICATION NUMBER: US/10/317,444
; PRIOR FILING DATE: 2002-12-11
; PRIOR APPLICATION NUMBER: US 60/339,687
; PRIOR FILING DATE: 2001-12-11
; NUMBER OF SEQ ID NOS: 560
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 385
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Escherichia coli K-12
US-10-317-444-385
```

Query Match

```
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 151 TGCTGCGCTGCTGCTGCG 167
DB 18 TGCTGCGCTGCTGCTGCG 2
```

```
RESULT 916
US-10-317-444-386
; Sequence 386, Application US/10317444
; Publication No. US20030235837A1
; GENERAL INFORMATION:
; APPLICANT: Keim, Paul
; APPLICANT: Keys, Christine
; TITLE OF INVENTION: High resolution typing system for pathogenic E. coli
; FILE REFERENCE: NAU2020US
; CURRENT APPLICATION NUMBER: US/10/317,444
; CURRENT FILING DATE: 2002-12-11
; PRIOR APPLICATION NUMBER: US 60/339,687
; PRIOR FILING DATE: 2001-12-11
; NUMBER OF SEQ ID NOS: 560
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 386
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Escherichia coli K-12
US-10-317-444-386

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGGCG 167
Db 1 TGCTGGCGCTGCTGGCG 17

RESULT 917
US-10-317-444-430
; Sequence 430, Application US/10317444
; Publication No. US20030235837A1
; GENERAL INFORMATION:
; APPLICANT: Keim, Paul
; APPLICANT: Keys, Christine
; TITLE OF INVENTION: High resolution typing system for pathogenic E. coli
; FILE REFERENCE: NAU2020US
; CURRENT APPLICATION NUMBER: US/10/317,444
; CURRENT FILING DATE: 2002-12-11
; PRIOR APPLICATION NUMBER: US 60/339,687
; PRIOR FILING DATE: 2001-12-11
; NUMBER OF SEQ ID NOS: 560
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 430
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Escherichia coli O157:H7 pO157
US-10-317-444-430

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 151 TGCTGGCGCTGCTGGCG 167
Db 1 TGCTGGCGCTGCTGGCG 17

RESULT 918
US-10-349-143-8900/C
; Sequence 8900, Application US/10349143
; Publication No. US20040005584A1
; GENERAL INFORMATION:
; APPLICANT: Cohen, Daniel
; APPLICANT: Blumenfeld, Marta
; APPLICANT: Chumakov, Ilya
; TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
; FILE REFERENCE: GENSSET.020CPI
; CURRENT APPLICATION NUMBER: US/10/349,143
; CURRENT FILING DATE: 2003-01-21
```

```
; PRIOR APPLICATION NUMBER: US/09/422,978
; PRIOR FILING DATE: 1999-10-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/109,732
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/082,614
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 11796
; SEQ ID NO 8900
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..18
; OTHER INFORMATION: downstream amplification primer 99-1944 for SEQ 1035, in complemer
US-10-349-143-8900

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3919 AGAATGCGGATGCCA 3935
Db 17 AGAATGCGGATGCCA 1

RESULT 919
US-10-436-231-1/C
; Sequence 1, Application US/10436231
; Publication No. US2004015704A1
; GENERAL INFORMATION:
; APPLICANT: Stragene
; APPLICANT: Sorge, Joseph A
; APPLICANT: Firmin, Andrew
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR POLYNUCLEOTIDE SEQUENCE DETECTION
; FILE REFERENCE: 25436/2392
; CURRENT APPLICATION NUMBER: US/10/436,231
; CURRENT FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: US 60/452,481
; PRIOR FILING DATE: 2003-03-06
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Example Allele A comprising tandem repeats
US-10-436-231-1

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 177 CTGCTGCTGCTGCTGCT 193
Db 18 CTGCTGCTGCTGCTGCT 2

RESULT 920
US-10-436-231-2
; Sequence 2, Application US/10436231
; Publication No. US2004015704A1
; GENERAL INFORMATION:
; APPLICANT: Stragene
; APPLICANT: Sorge, Joseph A
; APPLICANT: Firmin, Andrew
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR POLYNUCLEOTIDE SEQUENCE DETECTION
; FILE REFERENCE: 25436/2392
; CURRENT APPLICATION NUMBER: US/10/436,231
; CURRENT FILING DATE: 2003-05-12
```



```

; PRIOR APPLICATION NUMBER: US 60/452,481
; PRIOR FILING DATE: 2003-03-06
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patent version 3.2
; SEQ ID NO 2
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Example Allele A comprising tandem repeats
US-10-436-231-2
```

```

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 18;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 177 CTGCTGCTGCTGCTGCT 193
Db 1 CTGCTGCTGCTGCTGCTT 17
```

```

RESULT 921
US-10-730-771-355/c
; Sequence 355, Application US/10730771
; Publication No. US20050074787A1
; GENERAL INFORMATION:
; APPLICANT: Fan, Jian-Bing
; APPLICANT: Hirschhorn, Joel N.
; APPLICANT: Huang, Xiaohua
; APPLICANT: Kaplan, Paul
; APPLICANT: Lander, Eric S.
; APPLICANT: Lockhart, David J.
; APPLICANT: Ryder, Thomas
; APPLICANT: Sklar, Pamela
; TITLE OF INVENTION: UNIVERSAL ARRAYS
; FILE REFERENCE: 2825.1016-007
; CURRENT FILING DATE: US/10730,771
; PRIOR FILING DATE: 2003-12-08
; PRIOR APPLICATION NUMBER: US 60/126,473
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: US 60/140,359
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: US 09/536,841
; PRIOR FILING DATE: 2000-03-27
; NUMBER OF SEQ ID NOS: 590
; SOFTWARE: PatsSeq for Windows Version 4.0
; SEQ ID NO 355
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Template sequence
US-10-730-771-355
```

```

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 19;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 2935 TCAGTGAAGCAACACA 2951
Db 17 TCAGTGAAGCAACAGA 1
```

```

RESULT 922
US-09-790-417-113
; Sequence 113, Application US/09790417
; Patent No. US20010031470A1
; GENERAL INFORMATION:
; APPLICANT: Shultz, John W
; APPLICANT: Lewis, Martin K.
; APPLICANT: Lieppe, Donna
; APPLICANT: Mandrekar, Michelle
; APPLICANT: Kephart, Daniel
```

```

; APPLICANT: Rhodes, Richard B.
; APPLICANT: Andrews, Christine A.
; APPLICANT: Hartnett, James R.
; APPLICANT: Gu, Trent
; APPLICANT: Olson, Ryan J.
; APPLICANT: Wood, Keith W.
; APPLICANT: Welch, Roy
; TITLE OF INVENTION: Nucleic Acid Detection
; FILE REFERENCE: Pro-103 6868/75528
; CURRENT APPLICATION NUMBER: US/09/790,417
; PRIOR FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: 09/358,972
; PRIOR FILING DATE: 1999-07-21
; PRIOR APPLICATION NUMBER: 09/042,287
; PRIOR FILING DATE: 1998-03-13
; NUMBER OF SEQ ID NOS: 290
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 113
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: probe for human cystic fibrosis gene
US-09-790-417-113
```

```

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 3770 CAGAGTCCTGAAACAG 3786
Db 2 CAGAGTACCTGAAACAG 18
```

```

RESULT 923
US-09-927-160-7
; Sequence 7, Application US/09927160
; Patent No. US20020108136A1
; GENERAL INFORMATION:
; APPLICANT: Patti, Suehwa
; APPLICANT: Zarling, David
; TITLE OF INVENTION: Transgenic Animals Produced by Homologous Sequence Targeting
; FILE REFERENCE: A-64580-4/RFT/RMS/AMS
; CURRENT APPLICATION NUMBER: US/09/927,160
; CURRENT FILING DATE: 2001-08-09
; PRIOR APPLICATION NUMBER: US 09/079,877
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: US 08/910,415
; PRIOR FILING DATE: 1997-08-13
; PRIOR APPLICATION NUMBER: US 60/041,173
; PRIOR FILING DATE: 1997-03-21
; PRIOR APPLICATION NUMBER: US 08/385,713
; PRIOR FILING DATE: 1995-02-08
; PRIOR APPLICATION NUMBER: US 08/275,916
; PRIOR FILING DATE: 1994-07-14
; PRIOR APPLICATION NUMBER: US 07/939,767
; PRIOR FILING DATE: 1992-09-02
; PRIOR APPLICATION NUMBER: US 07/873,438
; PRIOR FILING DATE: 1992-04-24
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-927-160-7
```

```

Query Match
Best Local Similarity 0.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

Qy 3770 CAGAGTCCTGAAACAG 3786
Db 1 CAGAGTACCTGAAACAG 18
```

Db 2 CAGAGTACTGTAACAG 18

RESULT 924

US-09-969-373-3646/C

Sequence 3646, Application US/09969373

Patent No. US20020133852A1

GENERAL INFORMATION:

APPLICANT: Efferitz, Roger J.

APPLICANT: Hauge, Brian M.

TITLE OF INVENTION: Soybean SSRs and Methods of Genotyping

FILE REFERENCE: 38-10(52679)A

CURRENT APPLICATION NUMBER: US/09/969,373

CURRENT FILING DATE: 2001-10-02

PRIOR APPLICATION NUMBER: US 09/754,853

PRIOR FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: US 09/760,427

PRIOR FILING DATE: 2001-01-13

PRIOR APPLICATION NUMBER: US 09/855,768

PRIOR FILING DATE: 2001-05-15

NUMBER OF SEQ ID NOS: 4593

SEQ ID NO 3646

LENGTH: 20

TYPE: DNA

ORGANISM: Glycine max

US-09-969-373-3646

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 2415 AAGATTGAAATCCAA 2431

19 AAGATTGAAATCCAA 3

RESULT 925

US-09-727-100-30

Sequence 30, Application US/09727100

Publication No. US20030018165A1

GENERAL INFORMATION:

APPLICANT: INNOGENETICS N.V.

TITLE OF INVENTION: NEW USES OF SUPPRESSIVE MACROPHAGE ACTIVATION FACTORS.

FILE REFERENCE: EP99-109.SMFF

CURRENT APPLICATION NUMBER: US/09/727,100

CURRENT FILING DATE: 2000-11-30

NUMBER OF SEQ ID NOS: 41

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 30

LENGTH: 20

TYPE: DNA

ORGANISM: Homo sapiens

US-09-727-100-30

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1073 CACATCACTCCAAAGC 1089

4 CCCATCACTCCAAAGC 20

RESULT 926

US-09-865-866-4/C

Sequence 4, Application US/09865866

Publication No. US20030045487A1

GENERAL INFORMATION:

APPLICANT: C. Frank Bennett

APPLICANT: Jacqueline Wyatt

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP IIA (SYNOVIAL) EX

FILE REFERENCE: RTS-0221

CURRENT APPLICATION NUMBER: US/09/865,866

US-09-969-373-3646/C

Sequence 3646, Application US/09969373

Patent No. US20020133852A1

GENERAL INFORMATION:

APPLICANT: Efferitz, Roger J.

APPLICANT: Hauge, Brian M.

TITLE OF INVENTION: Soybean SSRs and Methods of Genotyping

FILE REFERENCE: 38-10(52679)A

CURRENT APPLICATION NUMBER: US/09/969,373

CURRENT FILING DATE: 2001-10-02

PRIOR APPLICATION NUMBER: US 09/754,853

PRIOR FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: US 09/760,427

PRIOR FILING DATE: 2001-01-13

PRIOR APPLICATION NUMBER: US 09/855,768

PRIOR FILING DATE: 2001-05-15

NUMBER OF SEQ ID NOS: 4593

SEQ ID NO 3646

LENGTH: 20

TYPE: DNA

ORGANISM: Glycine max

US-09-969-373-3646

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 2415 AAGATTGAAATCCAA 2431

19 AAGATTGAAATCCAA 3

RESULT 925

US-09-727-100-30

Sequence 30, Application US/09727100

Publication No. US20030018165A1

GENERAL INFORMATION:

APPLICANT: INNOGENETICS N.V.

TITLE OF INVENTION: NEW USES OF SUPPRESSIVE MACROPHAGE ACTIVATION FACTORS.

FILE REFERENCE: EP99-109.SMFF

CURRENT APPLICATION NUMBER: US/09/727,100

CURRENT FILING DATE: 2000-11-30

NUMBER OF SEQ ID NOS: 41

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 30

LENGTH: 20

TYPE: DNA

ORGANISM: Homo sapiens

US-09-727-100-30

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1073 CACATCACTCCAAAGC 1089

4 CCCATCACTCCAAAGC 20

RESULT 926

US-09-865-866-4/C

Sequence 4, Application US/09865866

Publication No. US20030045487A1

GENERAL INFORMATION:

APPLICANT: C. Frank Bennett

APPLICANT: Jacqueline Wyatt

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP IIA (SYNOVIAL) EX

FILE REFERENCE: RTS-0221

CURRENT APPLICATION NUMBER: US/09/865,866

US-09-969-373-3646/C

Sequence 3646, Application US/09969373

Patent No. US20020133852A1

GENERAL INFORMATION:

APPLICANT: Efferitz, Roger J.

APPLICANT: Hauge, Brian M.

TITLE OF INVENTION: Soybean SSRs and Methods of Genotyping

FILE REFERENCE: 38-10(52679)A

CURRENT APPLICATION NUMBER: US/09/969,373

CURRENT FILING DATE: 2001-10-02

PRIOR APPLICATION NUMBER: US 09/754,853

PRIOR FILING DATE: 2001-01-05

PRIOR APPLICATION NUMBER: US 09/760,427

PRIOR FILING DATE: 2001-01-13

PRIOR APPLICATION NUMBER: US 09/855,768

PRIOR FILING DATE: 2001-05-15

NUMBER OF SEQ ID NOS: 4593

SEQ ID NO 3646

LENGTH: 20

TYPE: DNA

ORGANISM: Glycine max

US-09-969-373-3646

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 2415 AAGATTGAAATCCAA 2431

19 AAGATTGAAATCCAA 3

RESULT 925

US-09-727-100-30

Sequence 30, Application US/09727100

Publication No. US20030018165A1

GENERAL INFORMATION:

APPLICANT: INNOGENETICS N.V.

TITLE OF INVENTION: NEW USES OF SUPPRESSIVE MACROPHAGE ACTIVATION FACTORS.

FILE REFERENCE: EP99-109.SMFF

CURRENT APPLICATION NUMBER: US/09/727,100

CURRENT FILING DATE: 2000-11-30

NUMBER OF SEQ ID NOS: 41

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 30

LENGTH: 20

TYPE: DNA

ORGANISM: Homo sapiens

US-09-727-100-30

Query Match 0.1%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 6.1e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1073 CACATCACTCCAAAGC 1089

4 CCCATCACTCCAAAGC 20

RESULT 926

US-09-865-866-4/C

Sequence 4, Application US/09865866

Publication No. US20030045487A1

GENERAL INFORMATION:

APPLICANT: C. Frank Bennett

APPLICANT: Jacqueline Wyatt

TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP IIA (SYNOVIAL) EX

FILE REFERENCE: RTS-0221

CURRENT APPLICATION NUMBER: US/09/865,866

```
LENGTH: 20
TYPE: DNA
ORGANISM: Homo sapiens
US-09-990-433-7
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3770 CAGAGTCCTGGAACAG 3786
DB 2 CAGAGTACTGGAACAG 18
```

```
RESULT 929
US-10-152-297-12
Sequence 12, Application US/10152297
GENERAL INFORMATION:
APPLICANT: Shultz, John W
APPLICANT: Lewis, Martin K.
APPLICANT: Lieppe, Donna
APPLICANT: Mandrekas, Michelle
APPLICANT: Kephart, Daniel
APPLICANT: Rhodes, Richard B.
APPLICANT: Andrews, Christine A.
APPLICANT: Hartnett, James R.
APPLICANT: Gu, Trent
APPLICANT: Olson, Ryan J.
APPLICANT: Wood, Keith W.
APPLICANT: Welch, Roy
TITLE OF INVENTION: Nucleic Acid Detection
FILE REFERENCE: PRO-104 6868/75529
CURRENT APPLICATION NUMBER: US/10/152,297
CURRENT FILING DATE: 2002-05-20
PRIOR APPLICATION NUMBER: US/09/383,316
PRIOR FILING DATE: 1999-08-25
PRIOR APPLICATION NUMBER: 09/252,436
PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: 09/042,287
PRIOR FILING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 09/358,972
PRIOR FILING DATE: 1999-07-21
NUMBER OF SEQ ID NOS: 123
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
LENGTH: 20
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: probe for human cystic fibrosis gene
US-10-152-297-12
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 3770 CAGAGTCCTGGAACAG 3786
DB 2 CAGAGTACTGGAACAG 18
```

```
RESULT 930
US-10-371-474-72/C
Sequence 72, Application US/10371474
Publication No. US20030144242A1
GENERAL INFORMATION:
APPLICANT: Donna T. Ward
APPLICANT: William Gaarde
APPLICANT: Brett P. Monia
APPLICANT: Jacqueline Wyatt
TITLE OF INVENTION: ANTISENSE MODULATION OF MEK4 EXPRESSION
FILE REFERENCE: RTS-0169
```

```
CURRENT APPLICATION NUMBER: US/10/371,474
CURRENT FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: US/09/676,436
PRIOR FILING DATE: 2000-09-29
NUMBER OF SEQ ID NOS: 89
SEQ ID NO 72
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-371-474-72
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2613 TACATCTTCATGGAGAA 2629
DB 17 TACATCTTCATGGAGTA 1
```

```
RESULT 931
US-10-173-718-53
Sequence 53, Application US/10173718
Publication No. US20030232437A1
GENERAL INFORMATION:
APPLICANT: Hong Zhang
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF VEGF-C EXPRESSION
FILE REFERENCE: PTS-0036
CURRENT APPLICATION NUMBER: US/10/173,718
CURRENT FILING DATE: 2002-06-17
NUMBER OF SEQ ID NOS: 125
SEQ ID NO 53
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-173-718-53
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 640 AAGAAGCCAGCAAGTG 656
DB 1 AAGAAGCCAGCAAGTG 17
```

```
RESULT 932
US-10-173-718-107/C
Sequence 107, Application US/10173718
Publication No. US20030232437A1
GENERAL INFORMATION:
APPLICANT: Hong Zhang
APPLICANT: Kenneth W. Dobie
TITLE OF INVENTION: ANTISENSE MODULATION OF VEGF-C EXPRESSION
FILE REFERENCE: PTS-0036
CURRENT APPLICATION NUMBER: US/10/173,718
CURRENT FILING DATE: 2002-06-17
NUMBER OF SEQ ID NOS: 125
SEQ ID NO 107
LENGTH: 20
TYPE: DNA
ORGANISM: H. sapiens
FEATURE:
US-10-173-718-107
```

```
Query Match
Best Local Similarity 94.1%; Score 15.4; DB 1; Length 20;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

OY 640 AAGAGCCAGCAAGTG 656  
| | | | | | | | | |  
DB 20 AAGAGCCAGCAAGTG 4

## RESULT 933

US-10-174-456-12/c  
; Sequence 12, Application US/10174456  
; Publication No. US20030235910A1  
; GENERAL INFORMATION:  
; APPLICANT: Brett P. Monia  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF G PROTEIN-COUPLED RECEPTOR 49 EXPRESSION  
; FILE REFERENCE: RTS-0374  
; CURRENT APPLICATION NUMBER: US/10/174,456  
; CURRENT FILING DATE: 2002-06-17  
; NUMBER OF SEQ ID NOS: 139  
; SEQ ID NO 12  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-174-456-12

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 181 TGCTGCTGCTGCTGCG 197  
| | | | | | | | | |  
DB 18 TGCTGCTGCTGCTGCG 2

## RESULT 934

US-10-174-456-90  
; Sequence 90, Application US/10174456  
; Publication No. US20030235910A1  
; GENERAL INFORMATION:  
; APPLICANT: Brett P. Monia  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF G PROTEIN-COUPLED RECEPTOR 49 EXPRESSION  
; FILE REFERENCE: RTS-0374  
; CURRENT APPLICATION NUMBER: US/10/174,456  
; CURRENT FILING DATE: 2002-06-17  
; NUMBER OF SEQ ID NOS: 139  
; SEQ ID NO 90  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
; FEATURE:  
US-10-174-456-90

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 181 TGCTGCTGCTGCTGCG 197  
| | | | | | | | | |  
DB 3 TGCTGCTGCTGCTGCG 19

## RESULT 935

US-10-379-182-4  
; Sequence 4, Application US/10379182  
; Publication No. US2004001916A1  
; GENERAL INFORMATION:  
; APPLICANT: Zarlino, David A.  
; APPLICANT: Sana, Elissa P.  
; TITLE OF INVENTION: IN VIVO HOMOLOGOUS SEQUENCE TARGETING IN EUKARYOTIC CELLS  
; FILE REFERENCE: A-64604-3/AMP/JPB  
; CURRENT APPLICATION NUMBER: US/10/379,182

; CURRENT FILING DATE: 2003-03-03  
; PRIOR APPLICATION NUMBER: US 08/906,379  
; PRIOR FILING DATE: 1997-08-05  
; PRIOR APPLICATION NUMBER: US 07/873,438  
; PRIOR FILING DATE: 1992-04-24  
; NUMBER OF SEQ ID NOS: 9  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 4  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic construct  
US-10-379-182-4

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3770 CAGAGTCCCTGAACAG 3786  
| | | | | | | | | |  
DB 2 CAGAGTCCCTGAACAG 18

## RESULT 936

US-10-274-387-13  
; Sequence 13, Application US/10274387  
; Publication No. US20040077085A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF CDC14A EXPRESSION  
; FILE REFERENCE: RTS-0172  
; CURRENT APPLICATION NUMBER: US/10/274,387  
; CURRENT FILING DATE: 2002-10-17  
; NUMBER OF SEQ ID NOS: 89  
; SEQ ID NO 13  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-274-387-13

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 176 GCTGCTGCTGCTGCTGC 192  
| | | | | | | | | |  
DB 4 GCTGCTGCTGCTGCTGC 20

## RESULT 937

US-10-274-311-13  
; Sequence 13, Application US/10274311  
; Publication No. US20040077571A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; APPLICANT: Aparna Satthy  
; APPLICANT: Thomas McConigal  
; TITLE OF INVENTION: ANTISENSE MODULATION OF CDC14A EXPRESSION  
; FILE REFERENCE: RTS-0262  
; CURRENT APPLICATION NUMBER: US/10/274,311  
; CURRENT FILING DATE: 2002-10-17  
; NUMBER OF SEQ ID NOS: 89  
; SEQ ID NO 13  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-274-311-13

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 176 GGTGCTGCTGCTGCTGC 192  
|||||  
DB 4 GCTGCTGAGCATGCTGC 20

RESULT 938  
US-10-293-864-18/c

; Sequence 18, Application US/10293864  
; Publication No. US20040092465A1  
; GENERAL INFORMATION:

; APPLICANT: Kenneth W. Dobie

; TITLE OF INVENTION: MODULATION OF HUNTINGTIN INTERACTING PROTEIN 1 EXPRESSION

; FILE REFERENCE: RTS-0432

; CURRENT APPLICATION NUMBER: US/10/293,864

; CURRENT FILING DATE: 2002-11-11

; NUMBER OF SEQ ID NOS: 165

; SEQ ID NO 18

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-293-864-18

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2363 ACATGAGCAGGATATGG 2379  
|||||  
DB 20 ACATGAGCAGGATGTTGG 4

RESULT 939  
US-10-293-864-96

; Sequence 96, Application US/10293864

; Publication No. US20040092465A1

; GENERAL INFORMATION:

; APPLICANT: Kenneth W. Dobie

; TITLE OF INVENTION: MODULATION OF HUNTINGTIN INTERACTING PROTEIN 1 EXPRESSION

; FILE REFERENCE: RTS-0432

; CURRENT APPLICATION NUMBER: US/10/293,864

; CURRENT FILING DATE: 2002-11-11

; NUMBER OF SEQ ID NOS: 165

; SEQ ID NO 96

; LENGTH: 20

; TYPE: DNA

; ORGANISM: H. sapiens

; FEATURE:

US-10-293-864-96

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2363 ACATGAGCAGGATATGG 2379  
|||||  
DB 1 ACATGAGCAGGATGTTGG 17

RESULT 940  
US-10-300-399-46/c

; Sequence 46, Application US/10300399

; Publication No. US20040097450A1

; GENERAL INFORMATION:

; APPLICANT: Andrew T. Watt

; TITLE OF INVENTION: MODULATION OF TDP-1 EXPRESSION

; FILE REFERENCE: RTS-0173

; CURRENT APPLICATION NUMBER: US/10/300,399

; CURRENT FILING DATE: 2002-11-19

; NUMBER OF SEQ ID NOS: 158

; SEQ ID NO 46

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Antisense Oligonucleotide

US-10-300-399-46

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2132 TAAAGAAAGCATGCTGA 2148  
|||||  
DB 17 TAAAGAGAGCATGCTGA 1

RESULT 941  
US-10-300-399-121

; Sequence 121, Application US/10300399

; Publication No. US20040097450A1

; GENERAL INFORMATION:

; APPLICANT: Andrew T. Watt

; TITLE OF INVENTION: MODULATION OF TDP-1 EXPRESSION

; FILE REFERENCE: RTS-0173

; CURRENT APPLICATION NUMBER: US/10/300,399

; CURRENT FILING DATE: 2002-11-19

; NUMBER OF SEQ ID NOS: 158

; SEQ ID NO 121

; LENGTH: 20

; TYPE: DNA

; ORGANISM: H. sapiens

; FEATURE:

US-10-300-399-121

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2132 TAAAGAAAGCATGCTGA 2148  
|||||  
DB 4 TAAAGAGAGCATGCTGA 20

RESULT 942  
US-10-389-033-2

; Sequence 2, Application US/10389033

; Publication No. US20040180345A1

; GENERAL INFORMATION:

; APPLICANT: Erikson, Glen

; TITLE OF INVENTION: PRE-INCUBATION METHOD TO IMPROVE SIGNAL/NOISE RATIO OF NUCLEIC

; FILE REFERENCE: B1047/20138

; CURRENT APPLICATION NUMBER: US/10/389,033

; CURRENT FILING DATE: 2003-03-14

; NUMBER OF SEQ ID NOS: 14

; SOFTWARE: PatentIn version 3.2

; SEQ ID NO 2

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

US-10-389-033-2

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCCTGAAGACG 3786  
|||||  
DB 2 CAGAGTACCTGAAGACG 18

RESULT 943  
US-10-484-007-20/c  
; Sequence 20, Application US/10484007  
; Publication No. US20040259825A1  
; GENERAL INFORMATION:  
; APPLICANT: C. Frank Bennett  
; APPLICANT: Brenda F. Baker  
; APPLICANT: Jacqueline Wyatt  
; APPLICANT: Scott E. Davis  
; APPLICANT: Isis Pharmaceuticals, Inc.  
; TITLE OF INVENTION: ANTISENSE MODULATION OF CD40 LIGAND EXPRESSION  
; FILE REFERENCE: RSP-0397  
; CURRENT APPLICATION NUMBER: US/10/484,007  
; CURRENT FILING DATE: 2004-01-15  
; PRIOR APPLICATION NUMBER: 09/909,595  
; PRIOR FILING DATE: 2001-07-18  
; NUMBER OF SEQ ID NOS: 91  
; SEQ ID NO 20  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-484-007-20

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2553 ATCCCCGAGTGTGG 2569

Db 17 ATCACCAGATGATTGG 1

RESULT 944  
US-10-921-899-8  
; Sequence 8, Application US/10921899  
; Publication No. US2005003351A1  
; GENERAL INFORMATION:  
; APPLICANT: Fejgin, Moshe  
; APPLICANT: Amiel, Aliza  
; TITLE OF INVENTION: NON-INVASIVE PRENATAL GENETIC DIAGNOSIS USING TRANSCERVICAL CELLS  
; FILE REFERENCE: 28297  
; CURRENT APPLICATION NUMBER: US/10/921,899  
; CURRENT FILING DATE: 2004-08-20  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: Patentin version 3.2  
; SEQ ID NO 8  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Single strand DNA oligonucleotide  
US-10-921-899-8

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3770 CAGAGTCCCTGAACAG 3786

Db 2 CAGAGTACTGGAACAG 18

RESULT 945  
US-10-257-158A-6672  
; Sequence 6672, Application US/10257158A  
; Publication No. US20050142543A1  
; GENERAL INFORMATION:  
; APPLICANT: Barany, Francis  
; APPLICANT: Zilvi, Monib

; APPLICANT: Gerry, Norman P.  
; APPLICANT: Favis, Reyna  
; APPLICANT: Kliman, Richard  
; TITLE OF INVENTION: METHOD OF DESIGNING ADDRESSABLE ARRAY FOR DETECTION OF NUCLEIC ACI  
; TITLE OF INVENTION: SEQUENCE DIFFERENCES USING LIGASE DETECTION REACTION  
; FILE REFERENCE: 19603/2834  
; CURRENT APPLICATION NUMBER: US/10/257,158A  
; CURRENT FILING DATE: 2002-10-07  
; PRIOR APPLICATION NUMBER: PCT/US01/10958  
; PRIOR FILING DATE: 2001-04-04  
; PRIOR APPLICATION NUMBER: US 60/197,271  
; PRIOR FILING DATE: 2000-04-14  
; NUMBER OF SEQ ID NOS: 9544  
; SOFTWARE: Patentin version 3.1  
; SEQ ID NO 6672  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Hypothetical Probe Sequence  
US-10-257-158A-6672

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2207 AGGAAAGCTTGAGC 2223

Db 1 AGGAAAGCTTGAGC 17

RESULT 946  
US-10-257-158A-9215/c  
; Sequence 9215, Application US/10257158A  
; Publication No. US20050142543A1  
; GENERAL INFORMATION:  
; APPLICANT: Barany, Francis  
; APPLICANT: Zilvi, Monib  
; APPLICANT: Gerry, Norman P.  
; APPLICANT: Favis, Reyna  
; APPLICANT: Kliman, Richard  
; TITLE OF INVENTION: METHOD OF DESIGNING ADDRESSABLE ARRAY FOR DETECTION OF NUCLEIC ACI  
; TITLE OF INVENTION: SEQUENCE DIFFERENCES USING LIGASE DETECTION REACTION  
; FILE REFERENCE: 19603/2834  
; CURRENT APPLICATION NUMBER: US/10/257,158A  
; CURRENT FILING DATE: 2002-10-07  
; PRIOR APPLICATION NUMBER: PCT/US01/10958  
; PRIOR FILING DATE: 2001-04-04  
; PRIOR APPLICATION NUMBER: US 60/197,271  
; PRIOR FILING DATE: 2000-04-14  
; NUMBER OF SEQ ID NOS: 9544  
; SOFTWARE: Patentin version 3.1  
; SEQ ID NO 9215  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Hypothetical Probe Sequence  
US-10-257-158A-9215

Query Match 0.1%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 6.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4653 CCTAACCTGGCGGCT 4669

Db 17 CCTAACCTGTGCGCT 1

RESULT 947  
US-10-643-038-4/c  
; Sequence 4, Application US/10643038  
; Publication No. US20050143331A1

```

; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; TITLE OF INVENTION: ANTISENSE MODULATION OF PHOSPHOLIPASE A2, GROUP IIA (SYNOVIAL) EX
; FILE REFERENCE: RTS-0221
; CURRENT APPLICATION NUMBER: US/10/643,038
; PRIOR FILING DATE: 2003-08-18
; PRIOR APPLICATION NUMBER: US/09/865,866
; NUMBER OF SEQ ID NOS: 173
; SEQ ID NO 4
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR primer
US-10-643-038-4

Query Match          0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 6.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      4980 TCACAAATTCCTCATCG 4996
Db      18 TCACCAATTCCTCATCG 2

RESULT 948
US-11-088-882-8
; Sequence 8, Application US/11088882
; Publication No. US20050181429A1
; GENERAL INFORMATION:
; APPLICANT: Fejgin, Moshe
; APPLICANT: Amiel, Aliza
; TITLE OF INVENTION: NON-INVASIVE PRENATAL GENETIC DIAGNOSIS USING TRANSCERVICAL CELLS
; FILE REFERENCE: 29365
; CURRENT APPLICATION NUMBER: US/11/088,882
; CURRENT FILING DATE: 2005-03-25
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 8
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Single strand DNA oligonucleotide
US-11-088-882-8

Query Match          0.1%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 6.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      3770 CAGAGTCCCTGAAACAG 3786
Db      2 CAGAGTACCTGAAACAG 18

RESULT 949
US-10-318-819A-84
; Sequence 84, Application US/10318819A
; Publication No. US20040115645A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: MODULATION OF DRAX2 EXPRESSION
; FILE REFERENCE: PFS-0069
; CURRENT APPLICATION NUMBER: US/10/318,819A
; CURRENT FILING DATE: 2002-12-12
; NUMBER OF SEQ ID NOS: 133
; SEQ ID NO 84
; LENGTH: 20
; TYPE: DNA
```

```

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-318-819A-84

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      5298 AAAACATTTTCAACTTCAA 5317
Db      1 AAAGACATTTTCAACTGTAA 20

RESULT 950
US-09-465-589-7
; Sequence 7, Application US/09465589
; Patent No. US20020031764A1
; GENERAL INFORMATION:
; APPLICANT: KOCH, Jörn E.-Land
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR AMPLIFYING MULTIPLE TANDEM REPETITION
; FILE REFERENCE: 4305/1E293-0S2
; CURRENT APPLICATION NUMBER: US/09/465,589
; CURRENT FILING DATE: 1999-12-17
; PRIOR APPLICATION NUMBER: US 09/091,146
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: PCT/DK96/00513
; PRIOR FILING DATE: 1996-12-05
; PRIOR APPLICATION NUMBER: DK 1379/95
; PRIOR FILING DATE: 1995-12-05
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide with internal repetitions
US-09-465-589-7

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      3465 GACACAAAGAGAGAGAGAAA 3484
Db      1 GAAAGAAAGAGAGAGAGAAA 20

RESULT 951
US-09-944-036-49/C
; Sequence 49, Application US/09944036
; Patent No. US20020055095A1
; GENERAL INFORMATION:
; APPLICANT: YANG, Yeasing Y.
; APPLICANT: BRENTANO, Steven T.
; APPLICANT: BABOLA, Odile
; APPLICANT: TRAN, Nathalie
; APPLICANT: VERNET, Guy
; TITLE OF INVENTION: AMPLIFICATION OF HIV-1 SEQUENCES FOR DETECTION OF
; FILE REFERENCE: GP114-02.UT
; CURRENT APPLICATION NUMBER: US/09/944,036
; CURRENT FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/229,790
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence:  
OTHER INFORMATION: Oligonucleotide primer for Gag target sequence  
US-09-944-036-49

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2777 TGTGCAAAATGTGGCATCA 2796  
Db 20 TGTGCAAAAGAGGCATCA 1

RESULT 952  
US-09-889-761-11  
Sequence 11, Application US/09889761  
Patent No. US20020123037A1  
GENERAL INFORMATION:  
APPLICANT: Searle, Peter F.  
TITLE OF INVENTION: Selection Procedure Using Prodrug/Enzyme System  
FILE REFERENCE: CAC00067 (P21303US)  
CURRENT APPLICATION NUMBER: US/09/889,761  
CURRENT FILING DATE: 2001-07-20  
PRIOR APPLICATION NUMBER: PCT/GB00/00157  
PRIOR FILING DATE: 2000-01-21  
PRIOR APPLICATION NUMBER: 99014471.4  
PRIOR FILING DATE: 1999-01-22  
PRIOR APPLICATION NUMBER: 60/116,924  
PRIOR FILING DATE: 1999-01-22  
NUMBER OF SEQ ID NOS: 12  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 11  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: PCR Primer  
US-09-889-761-11

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1317 TGGCTGAACGTGTCATGC 1336  
Db 1 TGGCGAAGGTATGCATGC 20

RESULT 953  
US-09-918-026A-30  
Sequence 30, Application US/09918026A  
Publication No. US20030096772A1  
GENERAL INFORMATION:  
APPLICANT: Rosanne M. Crooke  
APPLICANT: Mark J. Graham  
APPLICANT: Kristina M. Lemonidis  
TITLE OF INVENTION: ANTISENSE MODULATION OF ACYL COA CHOLESTEROL ACYLTRANSFERASE-2 EX  
FILE REFERENCE: ISPH-0588  
CURRENT APPLICATION NUMBER: US/09/918,026A  
CURRENT FILING DATE: 2001-07-30  
NUMBER OF SEQ ID NOS: 65  
SEQ ID NO 30  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-09-918-026A-30

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2209 GAAAAGCTTGAGCCACA 2228  
Db 1 GAAAAGCTTGAGCCAGCA 20

RESULT 954  
US-09-972-607-31/C  
Sequence 31, Application US/09972607  
Publication No. US20030105037A1  
GENERAL INFORMATION:  
APPLICANT: Brett P. Monia  
APPLICANT: Jacqueline Wyatt  
TITLE OF INVENTION: ANTISENSE MODULATION OF INHIBITOR-KAPPA B KINASE-GAMMA EXPRESSION  
FILE REFERENCE: RTS-0191  
CURRENT APPLICATION NUMBER: US/09/972,607  
CURRENT FILING DATE: 2001-10-06  
NUMBER OF SEQ ID NOS: 88  
SEQ ID NO 31  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-09-972-607-31

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1714 AGGCTCGCGGAAATGAG 1733  
Db 20 AGGCTCGCGGAGTGAG 1

RESULT 955  
US-09-993-731-20  
Sequence 20, Application US/09993731  
Publication No. US20030105040A1  
GENERAL INFORMATION:  
APPLICANT: Brett P. Monia  
APPLICANT: Andrew T. Watt  
TITLE OF INVENTION: ANTISENSE MODULATION OF INHIBITOR-KAPPA B-R EXPRESSION  
FILE REFERENCE: RTS-0302  
CURRENT APPLICATION NUMBER: US/09/993,731  
CURRENT FILING DATE: 2001-11-13  
NUMBER OF SEQ ID NOS: 89  
SEQ ID NO 20  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-09-993-731-20

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2690 TGCTCCGAGAGCCAGGCTG 2709  
Db 1 TCCTCCAGAGCCAGGCCG 20

RESULT 956  
US-10-271-887-41/C  
Sequence 41, Application US/10271887  
Publication No. US20030087871A1  
GENERAL INFORMATION:  
APPLICANT: Hong Zhang  
APPLICANT: Andrew T. Watt  
TITLE OF INVENTION: ANTISENSE MODULATION OF CASPASE 9 EXPRESSION  
FILE REFERENCE: RTS-0183



```
; CURRENT APPLICATION NUMBER: US/10/271,887
; CURRENT FILING DATE: 2002-10-15
; PRIOR APPLICATION NUMBER: US/09/659,845A
; PRIOR FILING DATE: 2001-07-23
; NUMBER OF SEQ ID NOS: 174
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-271-887-41

Query Match
Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 580 CTTACATCTCGAATCAG 599
Db 20 CTTACATCTCGAATGAG 1

RESULT 957
US-10-145-493B-7
; Sequence 7, Application US/10145493B
; Publication No. US20030096777A1
; GENERAL INFORMATION:
; APPLICANT: Besterman, Jeffrey
; APPLICANT: Macleod, Robert
; APPLICANT: Siders, William
; TITLE OF INVENTION: Modulation of Gene Expression by Combination Therapy
; FILE REFERENCE: MET-015DV
; CURRENT APPLICATION NUMBER: US/10/145,493B
; PRIOR FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: 09/420,692
; PRIOR FILING DATE: 1999-10-19
; PRIOR APPLICATION NUMBER: US 60/104,804
; NUMBER OF SEQ ID NOS: 90
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: primer
US-10-145-493B-7

Query Match
Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1756 TTCTCTTCAGACTTCCTT 1775
Db 1 TTCTCTTCACACATTCCTT 20

RESULT 958
US-10-319-221-2/c
; Sequence 2, Application US/10319221
; Publication No. US20030159169A1
; GENERAL INFORMATION:
; APPLICANT: Colloidi, Paul
; APPLICANT: Fan, Liangchun
; APPLICANT: Ma, Chunghuang
; TITLE OF INVENTION: CELL CULTURE SYSTEM AND METHODS OF USE
; FILE REFERENCE: 290.00300101
; CURRENT APPLICATION NUMBER: US/10/319,221
; CURRENT FILING DATE: 2002-12-13
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 20

; TYPE: DNA
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: primer
US-10-319-221-2

Query Match
Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 4114 ATCTGCATCTCGAGATTTC 4133
Db 20 ACCTGCCATCAGCATTC 1

RESULT 959
US-10-032-585-4081
; Sequence 4081, Application US/10032585
; Publication No. US20030180953A1
; GENERAL INFORMATION:
; APPLICANT: Terry, Roemer D.
; APPLICANT: Bo, Jians
; APPLICANT: Charles, Boone
; APPLICANT: Howard, Bussey
; TITLE OF INVENTION: Gene Disruption Methodologies for Drug Target Discovery
; FILE REFERENCE: 10182-005-999
; CURRENT APPLICATION NUMBER: US/10/032,585
; CURRENT FILING DATE: 2001-12-20
; NUMBER OF SEQ ID NOS: 8000
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4081
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Candida albicans
US-10-032-585-4081

Query Match
Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 177 CTGCTGCTGCTGCTGCTGCGC 196
Db 1 CTGCTGCTGCTGCTGCTGCTGAC 20

RESULT 960
US-10-181-543-26/c
; Sequence 26, Application US/10181543
; Publication No. US20030211608A1
; GENERAL INFORMATION:
; APPLICANT: Isis Pharmaceuticals, Inc.
; APPLICANT: Madeline M. Butler
; APPLICANT: Robert McKay
; APPLICANT: Brett P. Morita
; APPLICANT: Jacqueline Wyatt
; TITLE OF INVENTION: ANTISENSE MODULATION OF GLYCOGEN SYNTHASE KINASE 3 BETA EXPRESSION
; FILE REFERENCE: RTSP-0339
; CURRENT APPLICATION NUMBER: US/10/181,543
; CURRENT FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 09/489,765
; PRIOR FILING DATE: 2000-01-19
; NUMBER OF SEQ ID NOS: 85
; SEQ ID NO 26
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-181-543-26

Query Match
Best Local Similarity 0.1%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

QY 2502 CTCGAGCTCTGGGAAGCT 2521  
Db 20 CTCGAGTATGAGAAAGCT 1

RESULT 961  
US-10-425-975-49/c  
; Sequence 49, Application US/10425975  
; Publication No. US20030228574A1  
; GENERAL INFORMATION:  
; APPLICANT: YANG, Yeasing Y.  
; APPLICANT: BRENTANO, Steven T.  
; APPLICANT: BABOLA, Odile  
; APPLICANT: TRAN, Nathalie  
; APPLICANT: VERNER, Guy  
; TITLE OF INVENTION: AMPLIFICATION OF HIV-1 SEQUENCES FOR DETECTION OF  
; TITLE OF INVENTION: SEQUENCES ASSOCIATED WITH DRUG-RESISTANCE MUTATIONS  
; FILE REFERENCE: G114-02.UT  
; CURRENT APPLICATION NUMBER: US/10/425,975  
; CURRENT FILING DATE: 2003-04-28  
; PRIOR APPLICATION NUMBER: US/09/944,036  
; PRIOR FILING DATE: 2001-08-31  
; PRIOR APPLICATION NUMBER: US 60/229,790  
; PRIOR FILING DATE: 2000-09-01  
; NUMBER OF SEQ ID NOS: 70  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 49  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:  
US-10-425-975-49  
OTHER INFORMATION: Oligonucleotide primer for gag target sequence

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2777 TGTGACAAATATGGCATCA 2796  
Db 20 TGTGCAAGAAGGCGCATCA 1

RESULT 962  
US-10-174-460-18/c  
; Sequence 18, Application US/10174460  
; Publication No. US20030232441A1  
; GENERAL INFORMATION:  
; APPLICANT: Brett P. Monia  
; APPLICANT: C. Frank Bennett  
; APPLICANT: Kenneth W. Dobie  
; TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 4 EXPRESSION  
; FILE REFERENCE: PTS-0014  
; CURRENT APPLICATION NUMBER: US/10/174,460  
; CURRENT FILING DATE: 2002-06-17  
; NUMBER OF SEQ ID NOS: 109  
; SEQ ID NO 18  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-174-460-18

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 152 GCTGGCGCTGCTGGCGCTGC 171  
Db 20 GCTGTGTGTCAGGCGCTGC 1

RESULT 963  
US-10-175-492-83  
; Sequence 83, Application US/10175492  
; Publication No. US20030232442A1  
; GENERAL INFORMATION:  
; APPLICANT: Kenneth W. Dobie  
; TITLE OF INVENTION: ANTISENSE MODULATION OF PAZ/PIWI DOMAIN-CONTAINING PROTEIN EXPRES  
; FILE REFERENCE: RTS-0435  
; CURRENT APPLICATION NUMBER: US/10/175,492  
; CURRENT FILING DATE: 2002-06-17  
; NUMBER OF SEQ ID NOS: 164  
; SEQ ID NO 83  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-175-492-83

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2121 AACTACCTCTCTAAGAAAG 2140  
Db 1 AACCACTCTCTAAGAAAG 20

RESULT 964  
US-10-175-492-158/c  
; Sequence 158, Application US/10175492  
; Publication No. US20030232442A1  
; GENERAL INFORMATION:  
; APPLICANT: Kenneth W. Dobie  
; TITLE OF INVENTION: ANTISENSE MODULATION OF PAZ/PIWI DOMAIN-CONTAINING PROTEIN EXPRES  
; FILE REFERENCE: RTS-0435  
; CURRENT APPLICATION NUMBER: US/10/175,492  
; CURRENT FILING DATE: 2002-06-17  
; NUMBER OF SEQ ID NOS: 164  
; SEQ ID NO 158  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: H. sapiens  
; FEATURE:  
US-10-175-492-158

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2121 AACTACCTCTCTAAGAAAG 2140  
Db 20 AACCACTCTCTAAGAAAG 1

RESULT 965  
US-10-452-002A-42  
; Sequence 42, Application US/10452002A  
; Publication No. US20030236195A1  
; GENERAL INFORMATION:  
; APPLICANT: Jerald S. Feltelson  
; APPLICANT: H. Ernest Schnepf  
; APPLICANT: Kenneth E. Narva  
; APPLICANT: Brian A. Stockhoff  
; APPLICANT: James L. Schmeltz  
; APPLICANT: David Joewer  
; APPLICANT: Charles J. Dullum  
; APPLICANT: Judy Muller-Cohn  
; APPLICANT: Lisa Stamp  
; APPLICANT: George Morrill  
; APPLICANT: Stacey Finstad Lee

```

; TITLE OF INVENTION: No. US20030236195A1e1 Pesticidal Proteins and Methods of Using Th
; FILE REFERENCE: MA708C2D1
; CURRENT APPLICATION NUMBER: US/10/452,002A
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: 09/307,106
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 09/073,898
; PRIOR FILING DATE: 1998-05-06
; PRIOR APPLICATION NUMBER: 08/960,780
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: 60/029,848
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Patencin Ver. 2.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: primer
; US-10-452-002A-42

```

```

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy      4806 TCCCTAAAGTATGAGACTA 4825
Db      1 TCCCTAAAGCATCAGAAATA 20

```

```

RESULT 966
; US-10-212-993-21/c
; Sequence 21, Application US/10212993
; Publication No. US20040023385A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Susan M. Frelier
; APPLICANT: Kenneth W. Dodie
; TITLE OF INVENTION: ANTISENSE MODULATION OF REQUIM EXPRESSION
; FILE REFERENCE: PIS-0031
; CURRENT APPLICATION NUMBER: US/10/212,993
; CURRENT FILING DATE: 2002-08-05
; NUMBER OF SEQ ID NOS: 132
; SEQ ID NO 21
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-212-993-21

```

```

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy      1351 TAGATGGTGACCTACCTG 1370
Db      20 TTGATGGGCCACCCACCTG 1

```

```

RESULT 967
; US-10-628-841-31/c
; Sequence 31, Application US/10628841
; Publication No. US2004002918A1
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Jacqueline Wyatc
; TITLE OF INVENTION: ANTISENSE MODULATION OF INHIBITOR-KAPPA B KINASE-GAMMA EXPRESSION
; FILE REFERENCE: RTS-0191
; CURRENT APPLICATION NUMBER: US/10/628,841
; CURRENT FILING DATE: 2003-07-28

```

```

; PRIOR APPLICATION NUMBER: US/09/972,607
; PRIOR FILING DATE: 2001-10-06
; NUMBER OF SEQ ID NOS: 88
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
; US-10-628-841-31

```

```

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

Qy      1714 AGGCTTCGCGGAAATGAG 1733
Db      20 AGGCTTCGCGGAGGTGAG 1

```

```

RESULT 968
; US-10-087-684-129
; Sequence 129, Application US/10087684
; Publication No. US20040029116A1
; GENERAL INFORMATION:
; APPLICANT: Edinger, Shlomit R.
; APPLICANT: MacDougall, John R.
; APPLICANT: Millet, Isabelle
; APPLICANT: Ellerman, Karen
; APPLICANT: Stone, David J.
; APPLICANT: Grose, William M.
; APPLICANT: Lepley, Denise M.
; APPLICANT: Rieger, Daniel K.
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Casman, Stacie J.
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Boldog, Ferenc L.
; APPLICANT: Li, Li
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Mishra, Vishnu
; APPLICANT: Shenoy, Suresh G.
; APPLICANT: Rastelli, Luca
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Vermet, Corine A.M.
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Malyankar, Brian M.
; APPLICANT: Guo, Xiaojia
; APPLICANT: Miller, Charles E.
; APPLICANT: Gangoli, Baha A.
; TITLE OF INVENTION: PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 21402-214 CIP
; CURRENT APPLICATION NUMBER: US/10/087,684
; CURRENT FILING DATE: 2003-03-10
; PRIOR APPLICATION NUMBER: 60/253,834
; PRIOR FILING DATE: 2000-11-29
; PRIOR APPLICATION NUMBER: 60/250,926
; PRIOR FILING DATE: 2000-11-30
; PRIOR APPLICATION NUMBER: 60/264,180
; PRIOR FILING DATE: 2001-01-25
; PRIOR APPLICATION NUMBER: 60/274,194
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 60/313,656
; PRIOR FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: 60/327,456
; PRIOR FILING DATE: 2001-10-05
; NUMBER OF SEQ ID NOS: 220
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 129
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Primer/Probe

```

US-10-087-684-129

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 174 GCCTGCTGCTGCTGCTGCT 193  
Db 1 GCCATGCTGCTGCTGCTGCT 20

RESULT 969

US-10-218-779-129  
; Sequence 129, Application US/10218779  
; Publication No. US20040029222A1  
; GENERAL INFORMATION:  
; APPLICANT: Edinger, Shlomit  
; APPLICANT: MacDougall, John  
; APPLICANT: Miller, Isabelle  
; APPLICANT: Ellerman, Karen  
; APPLICANT: Stone, David  
; APPLICANT: Gerlach, Valerie  
; APPLICANT: Grose, William  
; APPLICANT: Alsbrook II, John  
; APPLICANT: Lepley, Denise  
; APPLICANT: Rieger, Daniel  
; APPLICANT: Burgess, Catherine  
; APPLICANT: Casman, Stacie  
; APPLICANT: Spytek, Kimberly  
; APPLICANT: Boldog, Ferenc  
; APPLICANT: Li, Li  
; APPLICANT: Padigaru, Muralidhara  
; APPLICANT: Mishra, Vishnu  
; APPLICANT: Patturajan, Meera  
; APPLICANT: Shenoy, Suresh  
; APPLICANT: Rastelli, Luca  
; APPLICANT: Tchernev, Velizar  
; APPLICANT: Vermet, Corine  
; APPLICANT: Zerhusen, Bryan  
; APPLICANT: Malyankar, Driel  
; APPLICANT: Guo, Xiaojia  
; APPLICANT: Miller, Charles  
; APPLICANT: Gangoli, Esha  
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same  
; FILE REFERENCE: 21402-214  
; CURRENT APPLICATION NUMBER: US/10/218, 779  
; PRIOR FILING DATE: 2002-08-14  
; PRIOR APPLICATION NUMBER: 60/253, 834  
; PRIOR FILING DATE: 2000-11-29  
; PRIOR APPLICATION NUMBER: 60/250, -926  
; PRIOR FILING DATE: 2000-11-30  
; PRIOR APPLICATION NUMBER: 60/264, 180  
; PRIOR FILING DATE: 2001-01-25  
; PRIOR APPLICATION NUMBER: 60/313, 656  
; PRIOR FILING DATE: 2001-08-20  
; PRIOR APPLICATION NUMBER: 60/327, 456  
; PRIOR FILING DATE: 2001-10-05  
; NUMBER OF SEQ ID NOS: 216  
; SOFTWARE: Patentin Ver. 2.1  
; SEQ ID NO 129  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURES:  
; OTHER INFORMATION: Description of Artificial Sequence: chemically  
; OTHER INFORMATION: synthesized  
US-10-218-779-129

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 174 GCCTGCTGCTGCTGCT 193

Db 1 GCCATGCTGCTGCTGCT 20

RESULT 970  
US-10-420-529-165

; Sequence 165, Application US/10420529  
; Publication No. US2004007572A1  
; GENERAL INFORMATION:  
; APPLICANT: REGENTS OF THE UNIVERSITY OF MINNESOTA  
; APPLICANT: HACKETT, Perry  
; APPLICANT: CLARK, Karl  
; APPLICANT: COI, Zongbin  
; APPLICANT: DUPUY, Adam  
; APPLICANT: GEURTS, Aron  
; APPLICANT: LIU, Geyi  
; TITLE OF INVENTION: TRANSPOSON SYSTEM AND METHODS OF USE  
; FILE REFERENCE: 110, 01730101  
; CURRENT APPLICATION NUMBER: US/10/420, 529  
; CURRENT FILING DATE: 2003-04-22  
; PRIOR APPLICATION NUMBER: 10/128, 998  
; PRIOR FILING DATE: 2002-04-22  
; PRIOR APPLICATION NUMBER: 60/379, 572  
; PRIOR FILING DATE: 2002-05-10  
; NUMBER OF SEQ ID NOS: 184  
; SOFTWARE: Patentin version 3.0  
; SEQ ID NO 165  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: ARTIFICIAL  
; FEATURES:  
; OTHER INFORMATION: primer  
US-10-420-529-165

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3829 TGAGTCATGCTTCAGAG 3848  
Db 1 TGATGTCATGCTTTAGAG 20

RESULT 971  
US-10-688-706-549/C  
; Sequence 549, Application US/10688706  
; Publication No. US20040102412A1  
; GENERAL INFORMATION:  
; APPLICANT: Pharmacia Corp.  
; APPLICANT: Broschat, Kay  
; TITLE OF INVENTION: ANTISENSE MODULATION OF GFAT EXPRESSION  
; FILE REFERENCE: 01393/1  
; CURRENT APPLICATION NUMBER: US/10/688, 706  
; CURRENT FILING DATE: 2003-10-17  
; PRIOR APPLICATION NUMBER: 60/419, 268  
; PRIOR FILING DATE: 2002-10-17  
; NUMBER OF SEQ ID NOS: 3071  
; SOFTWARE: Patentin version 3.2  
; SEQ ID NO 549  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: artificial  
; FEATURES:  
; OTHER INFORMATION: human GFAT antisense  
US-10-688-706-549

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 2202 TTGGAGGAAAGGCTTTGA 2221  
Db 20 TTGGAAAGCAAGGCTATGA 1

```
RESULT 972
US-10-688-706-886/c
; Sequence 886, Application US/10688706
; Publication No. US20040102412A1
; GENERAL INFORMATION:
; APPLICANT: Pharmacia Corp.
; APPLICANT: Broeschat, Kay
; TITLE OF INVENTION: ANTISENSE MODULATION OF GFAT EXPRESSION
; FILE REFERENCE: 01393/1
; CURRENT APPLICATION NUMBER: US/10/688,706
; PRIOR FILING DATE: 2003-10-17
; PRIOR APPLICATION NUMBER: 60/419,268
; PRIOR FILING DATE: 2002-10-17
; NUMBER OF SEQ ID NOS: 3071
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 886
; LENGTH: 20
; TYPE: DNA
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: human GFAT antisense
US-10-688-706-886
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      854 CCAGTCTGTCTGCTGACAGC 873
DB      20 CCAGTCTGTCTGCTGACAGC 1
```

```
RESULT 973
US-10-688-706-904/c
; Sequence 904, Application US/10688706
; Publication No. US20040102412A1
; GENERAL INFORMATION:
; APPLICANT: Pharmacia Corp.
; APPLICANT: Broeschat, Kay
; TITLE OF INVENTION: ANTISENSE MODULATION OF GFAT EXPRESSION
; FILE REFERENCE: 01393/1
; CURRENT APPLICATION NUMBER: US/10/688,706
; PRIOR FILING DATE: 2003-10-17
; PRIOR APPLICATION NUMBER: 60/419,268
; PRIOR FILING DATE: 2002-10-17
; NUMBER OF SEQ ID NOS: 3071
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 904
; LENGTH: 20
; TYPE: DNA
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: human GFAT antisense
US-10-688-706-904
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      849 AGCAGCCAGTCTGTCTGACGTA 868
DB      20 AGAACCAGTCTGTCTGACATA 1
```

```
RESULT 974
US-10-671-395-498
; Sequence 498, Application US/10671395
; Publication No. US2004012063A1
; GENERAL INFORMATION:
; APPLICANT: Pharmacia Corp.
; APPLICANT: Gierse, James K
```

```
; TITLE OF INVENTION: ANTISENSE MODULATION OF MICROSOAMAL PROSTAGLANDIN E2 SYNTHASE
; FILE REFERENCE: 1179/1/US
; CURRENT APPLICATION NUMBER: US/10/671,395
; PRIOR FILING DATE: 2003-09-25
; PRIOR APPLICATION NUMBER: 60/413,549
; PRIOR FILING DATE: 2002-09-25
; NUMBER OF SEQ ID NOS: 1809
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 498
; LENGTH: 20
; TYPE: DNA
; ORGANISM: artificial
; FEATURE:
; OTHER INFORMATION: Human PGE2 antisense
US-10-671-395-498
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      404 GAAGACCGAGCCAGTGACACC 423
DB      1 GAAGACCGAGGAGTGACATCC 20
```

```
RESULT 975
US-10-712-795-814/c
; Sequence 814, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 814
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-814
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      4890 GATATGACCTTCTCTTAAGCA 4909
DB      20 GATCTTACCTTCTCTCAAGCA 1
```

```
RESULT 976
US-10-712-795-817/c
; Sequence 817, Application US/10712795
; Publication No. US20040214325A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39662
; CURRENT APPLICATION NUMBER: US/10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-05-13
; NUMBER OF SEQ ID NOS: 892
```

SEQ ID NO 817  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-817

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4911 AATGCACTGCTGCTTCTGA 4930  
DB 20 AATGCACTGCTGCTGCTGA 1

RESULT 977  
US-10-712-795-818/c  
Sequence 818, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 818  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-818

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4920 CTCGCTTCTGAATATTCAGGC 4939  
DB 20 CTCGCTGCTGATATTCAGGC 1

RESULT 978  
US-10-712-795-866/c  
Sequence 866, Application US/10712795  
Publication No. US20040214325A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39662  
CURRENT APPLICATION NUMBER: US/10/712,795  
CURRENT FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-05-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 866  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-712-795-866

Query Match 0.1%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3249 GGTCCGAAAGCAAGCTGAGGC 3268  
DB 20 GGTCCGAAATTAATCTGAGGC 1

RESULT 979  
US-10-759-519-44/c  
Sequence 44, Application US/10759519  
Publication No. US20040224331A1  
GENERAL INFORMATION:  
APPLICANT: CANTOR, CHARLES R.  
APPLICANT: DING, CHUNMING  
TITLE OF INVENTION: HAPLOTYPE ANALYSIS  
FILE REFERENCE: 701586-53651-US  
CURRENT APPLICATION NUMBER: US/10/759,519  
CURRENT FILING DATE: 2004-01-16  
PRIOR APPLICATION NUMBER: 60/441,046  
PRIOR FILING DATE: 2003-01-17  
NUMBER OF SEQ ID NOS: 48  
SOFTWARE: PatentIn Ver. 3.2  
SEQ ID NO 44  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-759-519-44

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2164 CTTTGATTTGCTTCTCAGCT 2183  
DB 20 CTTTGATTTCTTCTCATCT 1

RESULT 980  
US-10-490-074-1/c  
Sequence 1, Application US/10490074  
Publication No. US20040265826A1  
GENERAL INFORMATION:  
APPLICANT: Christian Huber  
APPLICANT: Herbert Oberacher  
TITLE OF INVENTION: Method for Sequencing Nucleic Acids  
FILE REFERENCE: 21385-US  
CURRENT APPLICATION NUMBER: US/10/490,074  
CURRENT FILING DATE: 2004-03-17  
PRIOR APPLICATION NUMBER:  
PRIOR FILING DATE: 2004-03-16  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 1  
LENGTH: 20  
TYPE: DNA  
ORGANISM: artificial  
FEATURE:  
OTHER INFORMATION: 20-mer oligonucleotide  
US-10-490-074-1

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3025 GCAAGCAAGCTTTCTCGGC 3044  
DB 20 GCCAGAAAGCTTTCTCTGC 1

```
RESULT 981
US-10-484-441-30
; Sequence 30, Application US/10484441
; Publication No. US20040266705A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; APPLICANT: Kristina M. Lemonidis
; TITLE OF INVENTION: ANTISENSE MODULATION OF ACYL COA CHOLESTEROL ACYLTRANSFERASE?2 EX
; FILE REFERENCE: ISPH0694
; CURRENT APPLICATION NUMBER: US/10/484,441
; PRIOR FILING DATE: 2004-01-29
; PRIOR APPLICATION NUMBER: 09/918,026
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 65
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-484-441-30
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
Oy      2209 GAAAGGCTTTGAGCCACA 2228
Db      1 GCAAGGCTTGAGCCACA 20
```

```
RESULT 982
US-10-832-777-441/c
; Sequence 441, Application US/10832777
; Publication No. US20040266714A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth Dobie
; APPLICANT: Robert McKay
; TITLE OF INVENTION: MODULATION OF GLUCAGON RECEPTOR EXPRESSION
; FILE REFERENCE: BIOL0007US
; CURRENT APPLICATION NUMBER: US/10/832,777
; PRIOR FILING DATE: 2004-04-27
; PRIOR APPLICATION NUMBER: 60/466,256
; PRIOR FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 823
; SEQ ID NO 441
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-832-777-441
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
Oy      1197 GGCTCAGTGATGAAGCAGT 1216
Db      20 GGCCACAGTGATCATGCAGT 1
```

```
RESULT 983
US-10-832-777-785
; Sequence 785, Application US/10832777
; Publication No. US20040266714A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; APPLICANT: Kenneth Dobie
; APPLICANT: Robert McKay
; TITLE OF INVENTION: MODULATION OF GLUCAGON RECEPTOR EXPRESSION
```

```
; FILE REFERENCE: BIOL0007US
; CURRENT APPLICATION NUMBER: US/10/832,777
; CURRENT FILING DATE: 2004-04-27
; PRIOR APPLICATION NUMBER: 60/466,256
; PRIOR FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 823
; SEQ ID NO 785
; LENGTH: 20
; TYPE: DNA
; ORGANISM: M. musculus
; FEATURE:
; OTHER INFORMATION:
US-10-832-777-785
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
Oy      1197 GGCTCAGTGATGAAGCAGT 1216
Db      1 GGCCACAGTGATCATGCAGT 20
```

```
RESULT 984
US-10-920-612-814/c
; Sequence 814, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
; SEQ ID NO 814
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-814
```

```
Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
Oy      4890 GATATGACCTTCTCTAAGCA 4909
Db      20 GATCTTACCTTCTCAAGCA 1
```

```
RESULT 985
US-10-920-612-817/c
; Sequence 817, Application US/10920612
; Publication No. US2005009088A1
; GENERAL INFORMATION:
; APPLICANT: Crooke et al.
; TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPROTEIN B EXPRESSION
; FILE REFERENCE: 30566/39634A
; CURRENT APPLICATION NUMBER: US/10/920,612
; PRIOR FILING DATE: 2004-08-17
; PRIOR APPLICATION NUMBER: PCT/US03/15493
; PRIOR FILING DATE: 2003-11-15
; PRIOR APPLICATION NUMBER: US 10/712,795
; PRIOR FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US 60/426,234
; PRIOR FILING DATE: 2002-11-13
; NUMBER OF SEQ ID NOS: 892
```

SEQ ID NO 817  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-817

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4911 AATGACGCTGCTGCTGCA 4930  
Db 20 AATGATTGCTACGTGCTGA 1

RESULT 986  
US-10-920-612-818/c  
Sequence 818, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 818  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-818

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4920 CTGCGTCTGATATCAGGC 4939  
Db 20 CTACGTCTGATATCAGGC 1

RESULT 987  
US-10-920-612-866/c  
Sequence 866, Application US/10920612  
Publication No. US2005009088A1  
GENERAL INFORMATION:  
APPLICANT: Crooke et al.  
TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION  
FILE REFERENCE: 30566/39634A  
CURRENT APPLICATION NUMBER: US/10/920,612  
CURRENT FILING DATE: 2004-08-17  
PRIOR APPLICATION NUMBER: PCT/US03/15493  
PRIOR FILING DATE: 2003-11-15  
PRIOR APPLICATION NUMBER: US 10/712,795  
PRIOR FILING DATE: 2003-11-13  
PRIOR APPLICATION NUMBER: US 60/426,234  
PRIOR FILING DATE: 2002-11-13  
NUMBER OF SEQ ID NOS: 892  
SEQ ID NO 866  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: Antisense Oligonucleotide  
US-10-920-612-866

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3249 GGTGCGAAGCAGCTGAGGC 3268  
Db 20 GGTGCGAATATATCTGAGGC 1

RESULT 988  
US-10-858-500-243/c  
Sequence 243, Application US/10858500  
Publication No. US20050014257A1  
GENERAL INFORMATION:  
APPLICANT: Rosanne M. Crooke  
APPLICANT: Mark J. Graham  
TITLE OF INVENTION: MODULATION OF C-REACTIVE PROTEIN EXPRESSION  
FILE REFERENCE: BIOL0014US  
CURRENT APPLICATION NUMBER: US/10/858,500  
CURRENT FILING DATE: 2004-06-01  
PRIOR APPLICATION NUMBER: US 09/912,724  
PRIOR FILING DATE: 2001-07-25  
PRIOR APPLICATION NUMBER: US 60/475,272  
PRIOR FILING DATE: 2003-06-02  
PRIOR APPLICATION NUMBER: US 60/540,042  
PRIOR FILING DATE: 2004-01-28  
NUMBER OF SEQ ID NOS: 627  
SEQ ID NO 243  
LENGTH: 20  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Antisense Oligonucleotide  
US-10-858-500-243

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4069 AGACTGTAGACACGAGCC 4088  
Db 20 AGACTGTAGACACGAGCC 1

RESULT 989  
US-10-858-500-404  
Sequence 404, Application US/10858500  
Publication No. US20050014257A1  
GENERAL INFORMATION:  
APPLICANT: Rosanne M. Crooke  
APPLICANT: Mark J. Graham  
TITLE OF INVENTION: MODULATION OF C-REACTIVE PROTEIN EXPRESSION  
FILE REFERENCE: BIOL0014US  
CURRENT APPLICATION NUMBER: US/10/858,500  
CURRENT FILING DATE: 2004-06-01  
PRIOR APPLICATION NUMBER: US 09/912,724  
PRIOR FILING DATE: 2001-07-25  
PRIOR APPLICATION NUMBER: US 60/475,272  
PRIOR FILING DATE: 2003-06-02  
PRIOR APPLICATION NUMBER: US 60/540,042  
PRIOR FILING DATE: 2004-01-28  
NUMBER OF SEQ ID NOS: 627  
SEQ ID NO 404  
LENGTH: 20  
TYPE: DNA  
ORGANISM: H. sapiens  
FEATURE:  
US-10-858-500-404

Query Match 0.1%; Score 15.2; DB 1; Length 20;



Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4069 AGACTGTTAGACACACGCC 4088  
|||  
Db 1 AGACTGTGAGACAGAACCC 20

## RESULT 990

US-10-832-622B-441/C  
; Sequence 441, Application US/10832622B  
; Publication No. US20050014713A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: MODULATION OF GLUCAGON RECEPTOR EXPRESSION  
; FILE REFERENCE: 30566/39991  
; CURRENT APPLICATION NUMBER: US/10/832,622B  
; CURRENT FILING DATE: 2004-04-27  
; PRIOR APPLICATION NUMBER: US 60/466,311  
; PRIOR FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 823  
; SEQ ID NO 441  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Oligonucleotide  
US-10-832-622B-441

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1197 GGCCTCAGTATGAGCAGCT 1216  
|||  
Db 20 GGCACAGCTGATCATGACAGT 1

## RESULT 991

US-10-832-622B-785  
; Sequence 785, Application US/10832622B  
; Publication No. US20050014713A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: MODULATION OF GLUCAGON RECEPTOR EXPRESSION  
; FILE REFERENCE: 30566/39991  
; CURRENT APPLICATION NUMBER: US/10/832,622B  
; CURRENT FILING DATE: 2004-04-27  
; PRIOR APPLICATION NUMBER: US 60/466,311  
; PRIOR FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 823  
; SEQ ID NO 785  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: M. musculus  
US-10-832-622B-785

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1197 GGCCTCAGTATGAGCAGT 1216  
|||  
Db 1 GGCACAGCTGATCATGACAGT 20

## RESULT 992

US-10-868-658-141/C  
; Sequence 141, Application US/10868658  
; Publication No. US20050047996A1  
; GENERAL INFORMATION:  
; APPLICANT: The Johns Hopkins University  
; TITLE OF INVENTION: A Phosphatase Associated with Metastasis

; FILE REFERENCE: 001107.00301  
; CURRENT APPLICATION NUMBER: US/10/868,658  
; CURRENT FILING DATE: 2004-06-16  
; PRIOR APPLICATION NUMBER: 60/327,332  
; PRIOR FILING DATE: 2001-10-09  
; NUMBER OF SEQ ID NOS: 190  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 141  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-868-658-141

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1738 AAGCAAGACCAAGAGGTT 1757  
|||  
Db 20 AGCAAGACCAAGAGGCT 1

## RESULT 993

US-10-902-704A-7/C  
; Sequence 7, Application US/10902704A  
; Publication No. US20050054847A1  
; GENERAL INFORMATION:  
; APPLICANT: Madden, Knut R  
; APPLICANT: Hecker, Karl H  
; APPLICANT: Lee, Byung-in  
; TITLE OF INVENTION: Composition and Methods for Preparing Short RNA Molecules and  
; FILE REFERENCE: 0942.5630002  
; CURRENT APPLICATION NUMBER: US/10/902,704A  
; CURRENT FILING DATE: 2004-07-30  
; PRIOR APPLICATION NUMBER: 60/491,758  
; PRIOR FILING DATE: 2003-08-01  
; PRIOR APPLICATION NUMBER: 60/520,383  
; PRIOR FILING DATE: 2003-11-17  
; NUMBER OF SEQ ID NOS: 18  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 7  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Primer laminAC-rev  
US-10-902-704A-7

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1740 GACAGACCAAGAGGTTCT 1759  
|||  
Db 20 GACAGTACCAGAGGCTTCT 1

## RESULT 994

US-10-475-146-83  
; Sequence 83, Application US/10475146  
; Publication No. US20050074878A1  
; GENERAL INFORMATION:  
; APPLICANT: Lex M. Cowsett  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF PTPN2 EXPRESSION  
; FILE REFERENCE: RTSP-0485  
; CURRENT APPLICATION NUMBER: US/10/475,146  
; CURRENT FILING DATE: 2003-10-17  
; PRIOR APPLICATION NUMBER: PCT/US02/15304  
; PRIOR FILING DATE: 2002-05-15  
; PRIOR APPLICATION NUMBER: US 09/861,159

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; PRIOR FILING DATE: 2001-05-18
; NUMBER OF SEQ ID NOS: 87
; SEQ ID NO 83
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-475-146-83

Query Match      0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      1068 AATCCGATCCTCCAAA 1087
Db      1 AATCCGATGCTCCAAA 20

RESULT 995
US-10-831-901A-2661
; Sequence 2661, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
; FILE REFERENCE: ISIS0083-100 (BIO00008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2661
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2661

Query Match      0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      3152 AGGAGATTGCGAGTATT 3171
Db      1 AGGAGACATGCGAGTATT 20

RESULT 996
US-10-831-901A-2662
; Sequence 2662, Application US/10831901A

Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
; FILE REFERENCE: ISIS0083-100 (BIO00008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2662
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2662

Query Match      0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      3151 CAGGAGATTGCGAGTAT 3170
Db      1 CAGGAGACATGCGAGTAT 20

RESULT 997
US-10-831-901A-2897/c
; Sequence 2897, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; TITLE OF INVENTION: Acute Respiratory Syndrome (SARS)
; FILE REFERENCE: ISIS0083-100 (BIO00008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
```

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; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2897
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2897

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy          1092 GCCGAGCTGTTTGAAGAC 1111
Db          20 GCAGAGCGCTGTGTGAAGAC 1

RESULT 998
US-10-831-901A-2898/c
; Sequence 2898, Application US/10831901A
; Publication No. US2005010085A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000808US)
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2898
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2898

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy          1093 CGGAGCTGTTTGAAGACT 1112
Db          20 CGGAGCTGTTTGAAGACT 1112

RESULT 999
US-10-831-901A-2900/c
; Sequence 2900, Application US/10831901A
; Publication No. US2005010085A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000808US)
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2900
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2900

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy          1095 GAAGCTGTTTGAAGACTCT 1114
Db          20 GAGGCTGTTGTGAAGACTTT 1

RESULT 1000
US-10-831-901A-2903/c
; Sequence 2903, Application US/10831901A
; Publication No. US2005010085A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000808US)
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2903
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-2903
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; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 2903
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
; US-10-831-901A-2903

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1098 GCTGTTTGAAGACTCTCA 1117
Db      20 GCTGTTTGAAGACTTACA 1

RESULT 1001
US-10-831-901A-3042/c
; Sequence 3042, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000805)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 3042
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
; US-10-831-901A-3043
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US-10-831-901A-3042

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      696 TTACCGTCAAGACGAGAA 715
Db      20 TTACCTCCAGATGAGAA 1

RESULT 1002
US-10-831-901A-3043/c
; Sequence 3043, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000805)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 3043
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
; US-10-831-901A-3043

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      697 TTACCGTCAAGACGAGAG 716
Db      20 TTACCTCCAGATGAGAG 1

RESULT 1003
US-10-831-901A-11961
; Sequence 11961, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
```

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APPLICANT: Lowery, Kristin Sannes
APPLICANT: Swayze, Eric
APPLICANT: Baker, Brenda F.
APPLICANT: Bennett, C. Frank
TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
FILE REFERENCE: ISIS0083-100 (BIOL000805)
CURRENT FILING DATE: 2004-04-26
PRIOR APPLICATION NUMBER: 60/466,426
PRIOR FILING DATE: 2003-04-28
PRIOR APPLICATION NUMBER: 60/468,562
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/467,770
PRIOR FILING DATE: 2003-04-30
PRIOR APPLICATION NUMBER: 60/468,627
PRIOR FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: 60/477,637
PRIOR FILING DATE: 2003-06-10
PRIOR APPLICATION NUMBER: 60/483,579
PRIOR FILING DATE: 2003-06-27
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 11961
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense compound
US-10-831-901A-11961

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 4209 AATGCTACAGCAACTGTGA 4228
Db 1 AATGCTACAGCACTGTGCA 20

RESULT 1004
US-10-831-901A-19629/c
; Sequence 19629, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000805)
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 30063
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-19629
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SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 19629
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense compound
US-10-831-901A-19629

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 4787 CATCATTAATAATGCTGCTT 4806
Db 20 CATCATTAATAATGCTGCTTT 1

RESULT 1005
US-10-831-901A-24829/c
; Sequence 24829, Application US/10831901A
; Publication No. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL000805)
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24829
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-24829

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 4782 AGTGCATCATTAATAATAC 4801
Db 20 ATTGCATCATTTAACACAC 1

RESULT 1006
US-10-831-901A-24831/c
; Sequence 24831, Application US/10831901A
; Publication No. US20050100885A1
```

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; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL0008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24831
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-24831

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      4784 TGGCATCATTAATACTG 4803
Db      20 TGGCATCATTAACAACAG 1

RESULT 1007
US-10-831-901A-29270/C
; Sequence 29270, Application US/10831901A
; Publication NO. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL0008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29271
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29271
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```

; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29270
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29270

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      625 TTCCCGCAGACAGAGAA 644
Db      20 TTCCCGCAGACAGAGAA 1

RESULT 1008
US-10-831-901A-29271/C
; Sequence 29271, Application US/10831901A
; Publication NO. US20050100885A1
; GENERAL INFORMATION:
; APPLICANT: Crooke, Stanley T.
; APPLICANT: Ecker, David J.
; APPLICANT: Sampath, Rangarajan
; APPLICANT: Freier, Susan M.
; APPLICANT: Massire, Christian
; APPLICANT: Hofstadler, Steven A.
; APPLICANT: Lowery, Kristin Sannes
; APPLICANT: Swayze, Eric
; APPLICANT: Baker, Brenda F.
; APPLICANT: Bennett, C. Frank
; TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe
; FILE REFERENCE: ISIS0083-100 (BIOL0008US)
; CURRENT APPLICATION NUMBER: US/10/831,901A
; CURRENT FILING DATE: 2004-04-26
; PRIOR APPLICATION NUMBER: 60/466,426
; PRIOR FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: 60/468,562
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/467,770
; PRIOR FILING DATE: 2003-04-30
; PRIOR APPLICATION NUMBER: 60/468,627
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 60/477,637
; PRIOR FILING DATE: 2003-06-10
; PRIOR APPLICATION NUMBER: 60/483,579
; PRIOR FILING DATE: 2003-06-27
; NUMBER OF SEQ ID NOS: 30063
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29271
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense compound
US-10-831-901A-29271

Query Match          0.1%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 6.4e+02;
Matches 11; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      626 TTCCCGCAGACAGAGAG 645
Db      20 TTCCCGCAGACAGAGAG 1
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Db 20 TGCCGACAGACAAAAGAAG 1

RESULT 1009  
US-10-349-780A-18  
; Sequence 18, Application US/10349780A  
; Publication No. US20040146866A1  
; GENERAL INFORMATION:  
; APPLICANT: Fu, Guoliang  
; TITLE OF INVENTION: QUANTITATIVE MULTIPLEX DETECTION OF NUCLEIC ACIDS  
; FILE REFERENCE: Patent1  
; CURRENT APPLICATION NUMBER: US/10/349,780A  
; CURRENT FILING DATE: 2003-01-24  
; NUMBER OF SEQ ID NOS: 284  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 18  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-349-780A-18

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3761 CTTGCATCAGAGTCCCTG 3780  
Db 1 CTTGCATCAGTGCCTG 20

RESULT 1010  
US-10-980-002-160/c  
; Sequence 160, Application US/10960002  
; Publication No. US20050191653A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; APPLICANT: Edward Wancewicz  
; APPLICANT: Brett P. Monia  
; APPLICANT: Andrew M. Sliwowski  
; APPLICANT: Lynetta Watts  
; APPLICANT: Thomas A. Leedom  
; TITLE OF INVENTION: MODULATION OF SGLT2 EXPRESSION  
; FILE REFERENCE: ISI0109-100 (BIOL0023US)  
; CURRENT APPLICATION NUMBER: US/10/980,002  
; CURRENT FILING DATE: 2004-11-02  
; PRIOR APPLICATION NUMBER: 60/517,334  
; PRIOR FILING DATE: 2003-11-03  
; PRIOR APPLICATION NUMBER: 10/946,498  
; PRIOR FILING DATE: 2004-09-21  
; NUMBER OF SEQ ID NOS: 271  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 160  
; LENGTH: 20  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Antisense Compound  
US-10-980-002-160

Query Match 0.1%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 6.4e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4870 TTGCACCTTAAACAAGATG 4889  
Db 20 TTGTACTTCCCAACAAGATG 1

RESULT 1011  
US-10-751-736-2106  
; Sequence 2106, Application US/10751736  
; Publication No. US20040265230A1  
; GENERAL INFORMATION:

; APPLICANT: Wyeth  
; APPLICANT: Martinez, Robert  
; APPLICANT: Brown, Eugene  
; APPLICANT: Liu, Wei  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING COLON  
; FILE REFERENCE: AM100927 (031896-002000)  
; CURRENT APPLICATION NUMBER: US/10/751,736  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US Provisional Application 60/438,000  
; PRIOR FILING DATE: 2003-01-06  
; NUMBER OF SEQ ID NOS: 54873  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 2106  
; LENGTH: 21  
; TYPE: RNA  
; ORGANISM: RNA1  
US-10-751-736-2106

Query Match 0.1%; Score 15.2; DB 1; Length 21;  
Best Local Similarity 40.0%; Pred. No. 6.8e+02;  
Matches 8; Conservative 9; Mismatches 3; Indels 0; Gaps 0;

QY 2605 TTCTTACTACATCTTCATG 2624  
Db 1 TUCUCUCUCUACUCUUAUG 20

RESULT 1012  
US-10-440-850-908/c  
; Sequence 908, Application US/10440850  
; Publication No. US20030207837A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Uatvis, Thale  
; APPLICANT: McSwigen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Induction of Graft Tolerance and Revert  
; FILE REFERENCE: 250/130 (MBHB00-900-A)  
; CURRENT APPLICATION NUMBER: US/10/440,850  
; CURRENT FILING DATE: 2003-05-19  
; PRIOR APPLICATION NUMBER: US/09/650,012  
; PRIOR FILING DATE: 2000-08-28  
; PRIOR APPLICATION NUMBER: US 08/585,684  
; PRIOR FILING DATE: 1996-01-12  
; PRIOR APPLICATION NUMBER: US 60/000,951  
; PRIOR FILING DATE: 1995-07-07  
; PRIOR APPLICATION NUMBER: US 09/038,073  
; PRIOR FILING DATE: 1998-03-11  
; NUMBER OF SEQ ID NOS: 2285  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 908  
; LENGTH: 15  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-440-850-908

Query Match 0.1%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 4.7e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4506 TCCTGGGACACACAG 4520  
Db 15 TCCTGGGACACACAG 1

RESULT 1013  
US-10-407-818-7  
; Sequence 7, Application US/10407818  
; Publication No. US20040198971A1  
; GENERAL INFORMATION:  
; APPLICANT: RABBANI, ELAZAR

```
/ APPLICANT: STAVRIANOPOULOS, JANNIS G.
/ APPLICANT: DONEGAN, JAMES J.
/ TITLE OF INVENTION: MULTISIGNAL LABELING REAGENTS, AND PROCESSES AND USES
/ TITLE OF INVENTION: THEREFOR
/ FILE REFERENCE: ENZ-65
/ CURRENT APPLICATION NUMBER: US/10/407,818
/ CURRENT FILING DATE: 2003-04-03
/ NUMBER OF SEQ ID NOS: 16
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 7
/ LENGTH: 15
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
/ OTHER INFORMATION: Synthetic oligonucleotide.
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
/ OTHER INFORMATION: oligonucleotide
US-10-407-818-7

Query Match          0.1%; Score 15; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 4.7e+02;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy      178 TGCTGCTGCTGCTGC 192
Db      1 TGCUGCTGCTGCTGCGC 15

RESULT 1014
US-10-712-795-873/c
/ Sequence 873, Application US/10712795
/ Publication No. US20040214325A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39662
/ CURRENT APPLICATION NUMBER: US/10/712,795
/ CURRENT FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
/ PRIOR FILING DATE: 2003-05-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 873
/ LENGTH: 15
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-712-795-873

Query Match          0.1%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      3254 GAAGCAGACTGAGGC 3268
Db      15 GAAGCAGACTGAGGC 1

RESULT 1015
US-10-920-612-873/c
/ Sequence 873, Application US/10920612
/ Publication No. US2005009088A1
/ GENERAL INFORMATION:
/ APPLICANT: Crooke et al.
/ TITLE OF INVENTION: ANTISENSE MODULATION OF APOLIPOPROTEIN B EXPRESSION
/ FILE REFERENCE: 30566/39634A
/ CURRENT APPLICATION NUMBER: US/10/920,612
/ CURRENT FILING DATE: 2004-08-17
/ PRIOR APPLICATION NUMBER: PCT/US03/15493
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/ PRIOR FILING DATE: 2003-11-15
/ PRIOR APPLICATION NUMBER: US 10/712,795
/ PRIOR FILING DATE: 2003-11-13
/ PRIOR APPLICATION NUMBER: US 60/426,234
/ PRIOR FILING DATE: 2002-11-13
/ NUMBER OF SEQ ID NOS: 892
/ SEQ ID NO 873
/ LENGTH: 15
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Antisense Oligonucleotide
US-10-920-612-873

Query Match          0.1%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      3254 GAAGCAGACTGAGGC 3268
Db      15 GAAGCAGACTGAGGC 1

RESULT 1016
US-09-866-108-1457/c
/ Sequence 1457, Application US/09866108
/ Patent No. US2002004880A1
/ GENERAL INFORMATION:
/ APPLICANT: GU, Yizhong
/ APPLICANT: JI, Yonggang
/ APPLICANT: PENN, Sharon G.
/ APPLICANT: HANZEL, David K.
/ APPLICANT: RANK, David R.
/ APPLICANT: CHEN, Wensheng
/ APPLICANT: SHANNON, Mark
/ TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
/ FILE REFERENCE: AEOMICA-7
/ CURRENT APPLICATION NUMBER: US/09/866,108
/ CURRENT FILING DATE: 2001-05-25
/ PRIOR APPLICATION NUMBER: US 60/207,456
/ PRIOR FILING DATE: 2000-05-26
/ PRIOR APPLICATION NUMBER: GB 24263.6
/ PRIOR FILING DATE: 2000-10-04
/ PRIOR APPLICATION NUMBER: US 60/236,359
/ PRIOR FILING DATE: 2000-09-27
/ PRIOR APPLICATION NUMBER: PCT/US01/00666
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00667
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00664
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00669
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00665
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00668
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00663
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00662
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00661
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: PCT/US01/00670
/ PRIOR FILING DATE: 2001-01-30
/ PRIOR APPLICATION NUMBER: US 60/234,687
/ PRIOR FILING DATE: 2000-09-21
/ PRIOR APPLICATION NUMBER: US 60/266,860
/ PRIOR FILING DATE: 2001-02-05
/ NUMBER OF SEQ ID NOS: 15752
/ SOFTWARE: Aecomica Sequence Listing Engine
/ SEQ ID NO 1457
/ LENGTH: 17
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TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-866-108-1457

Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1507 CCCAGAGCTGCTGG 1521  
DB 17 CCCAGAGCTGCTGG 3

RESULT 1017  
US-09-866-108-1458/c  
Sequence 1458, Application US/09866108  
Patent No. US20020048800A1  
GENERAL INFORMATION:  
APPLICANT: GU, Yizhong  
APPLICANT: JI, Yonggang  
APPLICANT: PENN, Sharon G.  
APPLICANT: HANZEL, David K.  
APPLICANT: RANK, David R.  
APPLICANT: CHEN, Wensheng  
APPLICANT: SHANNON, Mark  
TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE  
FILE REFERENCE: AEOMICA-7  
CURRENT APPLICATION NUMBER: US/09/866,108  
PRIOR FILING DATE: 2001-05-25  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: GB 24263.6  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00669  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00668  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00662  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00661  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00670  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: US 60/234,687  
PRIOR FILING DATE: 2000-09-21  
PRIOR APPLICATION NUMBER: US 60/266,860  
PRIOR FILING DATE: 2001-02-05  
NUMBER OF SEQ ID NOS: 15752  
SOFTWARE: Aeomica Sequence Listing Engine  
SEQ ID NO 1458  
LENGTH: 17  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-866-108-1458

Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1507 CCCAGAGCTGCTGG 1521  
DB 17 CCCAGAGCTGCTGG 3

DB 16 CCCAGAGCTGCTGG 2

RESULT 1018  
US-09-866-108-1459/c  
Sequence 1459, Application US/09866108  
Patent No. US20020048800A1  
GENERAL INFORMATION:  
APPLICANT: GU, Yizhong  
APPLICANT: JI, Yonggang  
APPLICANT: PENN, Sharon G.  
APPLICANT: HANZEL, David K.  
APPLICANT: RANK, David R.  
APPLICANT: CHEN, Wensheng  
APPLICANT: SHANNON, Mark  
TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE  
FILE REFERENCE: AEOMICA-7  
CURRENT APPLICATION NUMBER: US/09/866,108  
PRIOR FILING DATE: 2001-05-25  
PRIOR APPLICATION NUMBER: US 60/207,456  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: GB 24263.6  
PRIOR FILING DATE: 2000-10-04  
PRIOR APPLICATION NUMBER: US 60/236,359  
PRIOR FILING DATE: 2000-09-27  
PRIOR APPLICATION NUMBER: PCT/US01/00666  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00667  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00664  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00669  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00665  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00668  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00663  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00662  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00661  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: PCT/US01/00670  
PRIOR FILING DATE: 2001-01-30  
PRIOR APPLICATION NUMBER: US 60/234,687  
PRIOR FILING DATE: 2000-09-21  
PRIOR APPLICATION NUMBER: US 60/266,860  
PRIOR FILING DATE: 2001-02-05  
NUMBER OF SEQ ID NOS: 15752  
SOFTWARE: Aeomica Sequence Listing Engine  
SEQ ID NO 1459  
LENGTH: 17  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-866-108-1459

Query Match 0.1%; Score 15; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 5.6e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1507 CCCAGAGCTGCTGG 1521  
DB 15 CCCAGAGCTGCTGG 1

RESULT 1019  
US-09-927-046-1161  
Sequence 1161, Application US/09927046  
Publication No. US20030064946A1  
GENERAL INFORMATION:  
APPLICANT: Ribozyme Pharmaceuticals, Inc  
APPLICANT: McSwigen, Jim

```
APPLICANT: Thompson, Jim
APPLICANT: McKenzie, Tim
APPLICANT: Ayers, Dave
APPLICANT: Grube, Andrew
APPLICANT: Szymkowaki, Edmund
TITLE OF INVENTION: Method and Reagent for the Inhibition of Calcium Activated Chloro
FILE REFERENCE: 249/021
CURRENT APPLICATION NUMBER: US/09/927, 046
CURRENT FILING DATE: 2001-08-09
NUMBER OF SEQ ID NOS: 5450
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1161
LENGTH: 17
TYPE: RNA
ORGANISM: Homo sapiens
US-09-927-046-1161
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```
Query Match 0.1%; Score 15; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 3083 CTCACAGACTCCGC 3097
DB 3 CUCACAGACGACGCGC 17
```

```
RESULT 1020
US-10-723-361-1457/c
Sequence 1457, Application US/10723361
```

```
Publication No. US20040137589A1
GENERAL INFORMATION:
```

```
APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharon G.
APPLICANT: HANZEL, David K.
APPLICANT: RANK, David R.
APPLICANT: CHEN, Wensheng
APPLICANT: SHANNON, Mark
TITLE OF INVENTION: HUMAN MYOSIN-LIKE POLYPEPTIDE EXPRESSED PREDOMINANTLY IN HEART AN
FILE REFERENCE: PB0105
CURRENT APPLICATION NUMBER: US/10/723, 361
CURRENT FILING DATE: 2003-11-26
PRIOR APPLICATION NUMBER: US 09/866,108
PRIOR FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
NUMBER OF SEQ ID NOS: 15755
SOFTWARE: Aeomica Sequence Listing Engine
SEQ ID NO 1457
```

```
LENGTH: 17
TYPE: DNA
ORGANISM: Homo sapiens
US-10-723-361-1457
```

```
Query Match 0.1%; Score 15; DB 1; Length 17;
```

```
Best Local Similarity 100.0%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1507 CCCAGAGCTGCTGG 1521
DB 17 CCCAGAGCTGCTGG 3
```

```
RESULT 1021
```

```
US-10-723-361-1458/c
```

```
Sequence 1458, Application US/10723361
```

```
Publication No. US20040137589A1
```

```
GENERAL INFORMATION:
```

```
APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharon G.
APPLICANT: HANZEL, David K.
APPLICANT: RANK, David R.
APPLICANT: CHEN, Wensheng
APPLICANT: SHANNON, Mark
TITLE OF INVENTION: HUMAN MYOSIN-LIKE POLYPEPTIDE EXPRESSED PREDOMINANTLY IN HEART AN
FILE REFERENCE: PB0105
CURRENT APPLICATION NUMBER: US/10/723, 361
CURRENT FILING DATE: 2003-11-26
PRIOR APPLICATION NUMBER: US 09/866,108
PRIOR FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
NUMBER OF SEQ ID NOS: 15755
SOFTWARE: Aeomica Sequence Listing Engine
SEQ ID NO 1458
```

```
LENGTH: 17
TYPE: DNA
ORGANISM: Homo sapiens
US-10-723-361-1458
```

```
Query Match 0.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1507 CCCAGAGCTGCTGG 1521
DB 16 CCCAGAGCTGCTGG 2
```

```
RESULT 1022
```

```
US-10-723-361-1459/c
```

```
Sequence 1459, Application US/10723361
```

```
Publication No. US20040137589A1
```

```
GENERAL INFORMATION:
```

```
APPLICANT: GU, Yizhong
APPLICANT: JI, Yonggang
APPLICANT: PENN, Sharon G.
APPLICANT: HANZEL, David K.
APPLICANT: RANK, David R.
APPLICANT: CHEN, Wensheng
```

```
APPLICANT: SHANNON, Mark
TITLE OF INVENTION: HUMAN MYOSIN-LIKE POLYPEPTIDE EXPRESSED PREDOMINANTLY IN HEART AN
FILE REFERENCE: PB0105
CURRENT APPLICATION NUMBER: US/10/723,361
PRIOR FILING DATE: 2003-11-26
PRIOR APPLICATION NUMBER: US 09/866,108
PRIOR FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
Remaining Prior Application data removed - See file wrapper or PALM.
NUMBER OF SEQ ID NOS: 15755
SOFTWARE: Aeomica Sequence Listing Engine
SEQ ID NO 1459
LENGTH: 17
TYPE: DNA
ORGANISM: Homo sapiens
US-10-723-361-1459
```

```
Query Match 0.1%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 5,6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 1507 CCCGAGAGCTGCTG 1521

Db 15 CCCGAGAGCTGCTG 1

```
RESULT 1023
US-10-156-610-41/c
Sequence 41, Application US/10156610
Publication No. US20030050270A1
GENERAL INFORMATION:
APPLICANT: Brett P. Monia
APPLICANT: Lex M. Cowsett
APPLICANT: Erich Koller
TITLE OF INVENTION: ANTISENSE MODULATION OF INHIBITOR-KAPPA B KINASE-BETA EXPRESSION
FILE REFERENCE: ISPH-0666
CURRENT APPLICATION NUMBER: US/10/156,610
CURRENT FILING DATE: 2002-05-24
PRIOR APPLICATION NUMBER: US 09/856,246
PRIOR FILING DATE: 2001-08-30
PRIOR APPLICATION NUMBER: PCT/US99/16959
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: US 09/197,008
PRIOR FILING DATE: 1998-11-20
NUMBER OF SEQ ID NOS: 83
SEQ ID NO 41
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Antisense Oligonucleotide
US-10-156-610-41
```

```
Query Match 0.1%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 3511 GTTTGCAAGCAAG 3525

Db 15 GTTTGCAAGCAAG 1

```
RESULT 1024
US-10-498-794-49/c
Sequence 49, Application US/10498794
Publication No. US20050142552A1
GENERAL INFORMATION:
APPLICANT: Guriling, Hugh MD
TITLE OF INVENTION: Susceptibility locus for schizophrenia
FILE REFERENCE: 620-312
CURRENT APPLICATION NUMBER: US/10/498,794
CURRENT FILING DATE: 2004-06-14
PRIOR APPLICATION NUMBER: PCT/GB2002/005630
PRIOR FILING DATE: 2002-12-12
PRIOR APPLICATION NUMBER: GB 0129758.9
PRIOR FILING DATE: 2001-12-12
NUMBER OF SEQ ID NOS: 103
SOFTWARE: PatentIn version 3.1
SEQ ID NO 49
LENGTH: 18
TYPE: DNA
ORGANISM: Homo sapiens
US-10-498-794-49
```

```
Query Match 0.1%; Score 15; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Qy 1359 GTCACTACCTG 1373

Db 18 GTCACTACCTG 4

```
RESULT 1025
US-09-771-208-16
Sequence 16, Application US/09771208
Patent No. US20020155564A1
GENERAL INFORMATION:
APPLICANT: MEDRANO, JUAN
APPLICANT: BRADFORD, ERIC
APPLICANT: HORVAT, SIMON
TITLE OF INVENTION: CLONING OF A HIGH-GROWTH GENE
FILE REFERENCE: 407T-923710US
CURRENT APPLICATION NUMBER: US/09/771,208
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: US 08/999,477
PRIOR FILING DATE: 1997-12-29
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn version 3.0
SEQ ID NO 16
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: PCR primer
US-09-771-208-16
```

```
Query Match 0.1%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6,8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 2463 ATCTTGAGAGAGAG 2477

Db 5 ATCTTGAGAGAGAG 19

```
RESULT 1026
US-10-056-790-56/c
Sequence 56, Application US/10056790
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```
; Publication No. US20030165497A1
; GENERAL INFORMATION:
; APPLICANT: EXELIXIS, INC.
; TITLE OF INVENTION: RRP SEQUENCES AND KNOCKOUT MICE AND USES THEREOF
; FILE REFERENCE: RRPCTP2002
; CURRENT APPLICATION NUMBER: US/10/056,790
; CURRENT FILING DATE: 2002-01-23
; PRIOR APPLICATION NUMBER: US 09/908,419
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: US 60/219,289
; PRIOR FILING DATE: 2000-07-19
; PRIOR APPLICATION NUMBER: US 60/277,487
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: US 60/277,471
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: US 60/304,863
; PRIOR FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: US 60/296,076
; PRIOR FILING DATE: 2001-06-05
; PRIOR APPLICATION NUMBER: US 60/305,017
; PRIOR FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: US 60/328,605
; PRIOR FILING DATE: 2001-10-10
; PRIOR APPLICATION NUMBER: US 60/328,491
; PRIOR FILING DATE: 2001-10-10
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mouse origin
;
; US-10-056-790-56
```

```
Query Match
Best Local Similarity 100.0%; Score 15; DB 1; Length 20;
Pred. No. 6.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1356 GTGCTACCTACTG 1370
Db 20 GTGCTACCTACTG 6
```

```
RESULT 1027
US-10-289-762-3561
; Sequence 3561, Application US/10289762
; Publication No. US2004006218A1
; GENERAL INFORMATION:
; APPLICANT: Grifflais, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
; TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, prevention
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/10/289,762
; CURRENT FILING DATE: 2003-03-27
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 3561
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
;
; US-10-289-762-3561
```

```
Query Match
Best Local Similarity 100.0%; Score 15; DB 1; Length 20;
Pred. No. 6.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1011 AACGCGCTCTTT 1025
Db 5 AACGCGCTCTTT 19
```

RESULT 1028

```
US-10-146-575-23
; Sequence 23, Application US/10146575
; Publication No. US20030059800A1
; GENERAL INFORMATION:
; APPLICANT: Lighter, Jay
; APPLICANT: Guido, Marco
; TITLE OF INVENTION: GENOTYPING OF HUMAN CYP3A4
; FILE REFERENCE: SEQ-12P
; CURRENT APPLICATION NUMBER: US/10/146,575
; CURRENT FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: US/09/144,367
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 23
; LENGTH: 18
; TYPE: DNA
; ORGANISM: H. sapiens
;
; US-10-146-575-23
```

```
Query Match
Best Local Similarity 88.9%; Score 14.8; DB 1; Length 18;
Pred. No. 6.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 1632 TTAATCCAGACTCAAG 1649
Db 1 TGAATCCAGACTGANG 18
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```
RESULT 1029
US-10-169-983-27
; Sequence 27, Application US/10169983
; Publication No. US20030158250A1
; GENERAL INFORMATION:
; APPLICANT: Takara Shuzo Co., Ltd.
; TITLE OF INVENTION: Therapeutic agents
; FILE REFERENCE: 01-011-PCT
; CURRENT APPLICATION NUMBER: US/10/169,983
; CURRENT FILING DATE: 2002-07-14
; PRIOR APPLICATION NUMBER: JP 2000-4989
; PRIOR FILING DATE: 2000-01-13
; PRIOR APPLICATION NUMBER: JP 2000-303711
; PRIOR FILING DATE: 2000-10-03
; NUMBER OF SEQ ID NOS: 61
; SEQ ID NO 27
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Designed primer based on nucleotide sequence of
; OTHER INFORMATION: human macrophage inflammatory protein-2-alpha mRNA.
;
; US-10-169-983-27
```

```
Query Match
Best Local Similarity 88.9%; Score 14.8; DB 1; Length 18;
Pred. No. 6.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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```
QY 178 TGCTGCTGCTGCTG 195
Db 1 TGCTGCTGCTGCTG 18
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```
RESULT 1030
US-10-035-978A-22/c
; Sequence 22, Application US/10035978A
; Publication No. US20030165860A1
; GENERAL INFORMATION:
; APPLICANT: Quint, Wilhelmus
; APPLICANT: Van Doorn, Leonard
; TITLE OF INVENTION: PROBES, METHODS AND KITS FOR DETECTION
; TITLE OF INVENTION: AND TYPING OF HELICOBACTER PYLORI NUCLEIC ACIDS IN
; FILE REFERENCE: INNOG2.001C1
```

CURRENT APPLICATION NUMBER: US/10/035,978A  
CURRENT FILING DATE: 2001-12-21  
PRIOR APPLICATION NUMBER: 09/284,725  
PRIOR FILING DATE: 1999-04-16  
PRIOR APPLICATION NUMBER: EP 97870133.2  
PRIOR FILING DATE: 1997-09-09  
PRIOR APPLICATION NUMBER: EP 96870131.8  
PRIOR FILING DATE: 1996-10-16  
NUMBER OF SEQ ID NOS: 280  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 22  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: cagR1 primer  
US-10-035-978A-22

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4546 CCAAAAAGAAACAGCATT 4563  
DB 18 CCAAAAAGAAATCAGTATT 1

RESULT 1031  
US-10-263-594-22/c  
Sequence 22, Application US/10263594  
Publication No. US2003017546A1  
GENERAL INFORMATION:  
APPLICANT: Quint, Wilhelmus  
Van Doorn, Leendert  
TITLE OF INVENTION: Probes, methods and kits for detection and  
typing of Helicobacter pylori nucleic acids in biological  
samples.  
NUMBER OF SEQUENCES: 280  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Knobbe, Martens, Olson & Bear, LLP  
STREET: 620 Newport Center Drive, 16th Floor  
CITY: Newport Beach  
STATE: CA  
COUNTRY: USA  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/263,594  
FILING DATE: 02-Oct-2002  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/284,725  
FILING DATE: <Unknown>  
APPLICATION NUMBER: EP96/870131.8  
FILING DATE: 16-Oct-1996  
APPLICATION NUMBER: PCT/EP97/05614  
FILING DATE: 10-Oct-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Altman, Daniel E.  
REGISTRATION NUMBER: 34,115  
REFERENCE/DOCKET NUMBER: INNOG2.001AFC  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (949) 760-0404  
TELEFAX: (949) 760-9395  
INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
SEQUENCE DESCRIPTION: SEQ ID NO: 22:  
US-10-263-594-22

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4546 CCAAAAAGAAACAGCATT 4563  
DB 18 CCAAAAAGAAATCAGTATT 1

RESULT 1032  
US-10-280-066-205  
Sequence 205, Application US/10280066  
Publication No. US20030180718A1  
GENERAL INFORMATION:  
APPLICANT: Pillucia, Renka C.  
APPLICANT: Brissette, Renee  
APPLICANT: Spruyt, Michael  
APPLICANT: Dedova, Olga  
APPLICANT: Blume, Arthur J.  
APPLICANT: Prendergast, John  
TITLE OF INVENTION: TARGET SPECIFIC SCREENING AND ITS USE FOR IDENTIFYING TARGET BINDI  
FILE REFERENCE: 2598-4009US1  
CURRENT APPLICATION NUMBER: US/10/280,066  
CURRENT FILING DATE: 2002-10-24  
PRIOR APPLICATION NUMBER: 60/345,471  
PRIOR FILING DATE: 2001-10-24  
NUMBER OF SEQ ID NOS: 537  
SOFTWARE: Patentin Version 3.1  
SEQ ID NO 205  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial  
FEATURE:  
OTHER INFORMATION: PAMA forward "peptide" sequence forward primer  
NAME/KEY: misc feature  
OTHER INFORMATION: PAMA forward "peptide" sequence forward primer  
US-10-280-066-205

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 60 GCCCAGCCGCGCAGGCC 77  
DB 1 GCCCAGCCGCGCAGGCC 18

RESULT 1033  
US-10-440-850-1112  
Sequence 1112, Application US/10440850  
Publication No. US20030207837A1  
GENERAL INFORMATION:  
APPLICANT: Ribozyme Pharmaceuticals, Inc.  
APPLICANT: Stinchcomb, Dan  
APPLICANT: Jarvis, Thale  
APPLICANT: MCSwigen, Jim  
TITLE OF INVENTION: Method and Reagent for the Induction of Graft Tolerance and Rever  
TITLE OF INVENTION: Immune Responses  
FILE REFERENCE: 250/130 (MEH800-900-A)  
CURRENT APPLICATION NUMBER: US/10/440,850  
CURRENT FILING DATE: 2003-05-19  
PRIOR APPLICATION NUMBER: US/09/650,012  
PRIOR FILING DATE: 2000-08-28  
PRIOR APPLICATION NUMBER: US 08/585,684  
PRIOR FILING DATE: 1996-01-12

PRIOR APPLICATION NUMBER: US 60/000,951  
PRIOR FILING DATE: 1995-07-07  
PRIOR APPLICATION NUMBER: US 09/038,073  
PRIOR FILING DATE: 1998-03-11  
NUMBER OF SEQ ID NOS: 2285  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 1112  
LENGTH: 18  
TYPE: RNA  
ORGANISM: Homo sapiens  
US-10-440-850-1112

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 61.1%; Pred. No. 6.3e+02;  
Matches 11; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 178 TGCTGCTGCTGCTGCTG 195  
DB 1 UGUGCUGCUGCUGCAGG 18

RESULT 1034  
US-10-239-956-26/c  
Sequence 26, Application US/10239956  
Publication No. US20030208041A1  
GENERAL INFORMATION:  
APPLICANT: Zheng, Yungcong  
APPLICANT: Cully, Doris F.  
APPLICANT: Luderer, Steven W.  
TITLE OF INVENTION: DERMACENTOR VARIABILIIS GABA-GATED  
FILE REFERENCE: 20437P  
CURRENT APPLICATION NUMBER: US/10/239,956  
CURRENT FILING DATE: 2002-09-25  
PRIOR APPLICATION NUMBER: PCT/US01/09955  
PRIOR FILING DATE: 2001-03-28  
PRIOR APPLICATION NUMBER: 60/193,791  
PRIOR FILING DATE: 2000-03-31  
NUMBER OF SEQ ID NOS: 28  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 26  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Segment from dermacentor variabilis  
US-10-239-956-26

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1491 ACAACCTACAGGAGC 1508  
DB 18 ACAACCCGACAGAGACC 1

RESULT 1035  
US-10-349-143-8116  
Sequence 8116, Application US/10349143  
Publication No. US20040005584A1  
GENERAL INFORMATION:  
APPLICANT: Cohen, Daniel  
APPLICANT: Blumenfeld, Marta  
APPLICANT: Chumakov, Ilya  
TITLE OF INVENTION: Biallelic markers for use in constructing a high density...  
FILE REFERENCE: GENSRT.020CP1  
CURRENT APPLICATION NUMBER: US/10/349,143  
CURRENT FILING DATE: 2003-01-21  
PRIOR APPLICATION NUMBER: US/09/422,978  
PRIOR FILING DATE: 1999-10-20  
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850  
PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/109,732  
PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23  
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/082,614  
PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21  
NUMBER OF SEQ ID NOS: 11796  
SEQ ID NO 8116  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Homo Sapiens  
FEATURE:  
NAME/KEY: primer\_bind  
LOCATION: 1..18  
OTHER INFORMATION: downstream amplification primer 99-13853 for SEQ 251, in complemer  
US-10-349-143-8116

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1588 TGATTCGGCGGTCATTG 1605  
DB 1 TGATTCAGGGTCATTG 18

RESULT 1036  
US-10-455-229-28  
Sequence 28, Application US/10455229  
Publication No. US20040016030A1  
GENERAL INFORMATION:  
APPLICANT: LOWE, BRENDA A.  
APPLICANT: CHOMET, PAUL  
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PRODUCTION OF MAIZE LINES  
FILE REFERENCE: DEM-195US  
CURRENT APPLICATION NUMBER: US/10/455,229  
CURRENT FILING DATE: 2003-06-05  
PRIOR APPLICATION NUMBER: 60/386,522  
PRIOR FILING DATE: 2002-06-06  
NUMBER OF SEQ ID NOS: 32  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 28  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-455-229-28

Query Match 0.1%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 6.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4752 CTCTCCCTCAGCTCCAGC 4769  
DB 1 CTCTCCCTCAGCTCCGCC 18

RESULT 1037  
US-10-473-741-166/c  
Sequence 166, Application US/10473741  
Publication No. US20040235765A1  
GENERAL INFORMATION:  
APPLICANT: Kerr, William G  
APPLICANT: Wang, Jia-Wang  
TITLE OF INVENTION: LPS-Responsive CHS 1/Beige-Like Anchor Gene and Therapeutic Applic  
FILE REFERENCE: USF-112XC1  
CURRENT APPLICATION NUMBER: US/10/473,741  
CURRENT FILING DATE: 2003-10-01  
PRIOR APPLICATION NUMBER: PCT/US 02/10350  
PRIOR FILING DATE: 2002-04-02  
PRIOR APPLICATION NUMBER: US 60/280,107

```

; PRIOR FILING DATE: 2001-04-02
; NUMBER OF SEQ ID NOS: 176
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 166
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(18)
; OTHER INFORMATION: Intron 48 3' splice acceptor
US-10-473-741-166
```

```

Query Match      0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1113 CTCGAGGAACTGAAATAA 1130
Db      18 CTCGAGGAGCTGAAAAA 1
```

```

RESULT 1038
US-10-702-817-22/c
; Sequence 22, Application US/10702817
; Publication No. US20040147471A1
; GENERAL INFORMATION:
; APPLICANT: Hong Zhang
; TITLE OF INVENTION: ANTISENSE MODULATION OF TNFRI EXPRESSION
; FILE REFERENCE: ISPH-0797
; CURRENT APPLICATION NUMBER: US/10/702,817
; PRIOR FILING DATE: 2003-11-06
; PRIOR APPLICATION NUMBER: US 09/106,038
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: PCT/US99/13763
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: 09/695,451
; NUMBER OF SEQ ID NOS: 247
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-702-817-22
```

```

Query Match      0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      169 TGCGTGGCTGCTGCTGC 186
Db      18 TGCGTGGCTGCTGCTGC 1
```

```

RESULT 1039
US-10-702-817-24/c
; Sequence 24, Application US/10702817
; Publication No. US20040147471A1
; GENERAL INFORMATION:
; APPLICANT: Hong Zhang
; TITLE OF INVENTION: ANTISENSE MODULATION OF TNFRI EXPRESSION
; FILE REFERENCE: ISPH-0797
; CURRENT APPLICATION NUMBER: US/10/702,817
; PRIOR FILING DATE: 2003-11-06
; PRIOR APPLICATION NUMBER: US 09/106,038
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: PCT/US99/13763
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: 09/695,451
; PRIOR FILING DATE: 2000-10-24
```

```

; NUMBER OF SEQ ID NOS: 247
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-702-817-24
```

```

Query Match      0.1%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      177 CTGCTGCTGCTGCTGCTG 194
Db      18 CTGCTGCTGCTGCTGCTG 1
```

```

RESULT 1040
US-09-982-262B-43
; Sequence 43, Application US/09982262B
; Publication No. US20030077565A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; TITLE OF INVENTION: OLIGONUCLEOTIDE MODULATION OF CELL ADHESION
; FILE REFERENCE: ISPH-0612
; CURRENT APPLICATION NUMBER: US/09/982,262B
; PRIOR FILING DATE: 2001-10-18
; PRIOR APPLICATION NUMBER: 09/659,288
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 09/128,496
; PRIOR FILING DATE: 1998-08-03
; PRIOR APPLICATION NUMBER: 08/440,740
; PRIOR FILING DATE: 1995-05-12
; PRIOR APPLICATION NUMBER: 08/063,167
; PRIOR FILING DATE: 1993-05-17
; PRIOR APPLICATION NUMBER: 07/969,151
; PRIOR FILING DATE: 1993-02-10
; PRIOR APPLICATION NUMBER: 08/007,997
; PRIOR FILING DATE: 1993-01-21
; NUMBER OF SEQ ID NOS: 86
; SEQ ID NO 43
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Antisense Oligonucleotide
US-09-982-262B-43
```

```

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
QY      1141 CTGAGCAAAATATCCAGA 1158
Db      1 CTGAGCAAGATATATCTAGA 18
```

```

RESULT 1041
US-10-128-449A-21
; Sequence 21, Application US/10128449A
; Publication No. US20030108538A1
; GENERAL INFORMATION:
; APPLICANT: Jeye, Michael C.
; Doan, Kim-Anh T.
; Krawiec, John A.
; Lynch, Kevin J.
; Amin, Dillip V.
; South, Victoria J.
; TITLE OF INVENTION: LIG POLYPEPTIDES OF THE TRIACYLGLYCEROL
; LIPASE FAMILY, AND COMPOSITIONS AND METHODS FOR THEIR USE
```

```
IN ENZYMATIC HYDROLYSIS, AND PROTEIN AND GENE THERAPIES
;
; NUMBER OF SEQUENCES: 31
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rhone-Poulenc Rorer Inc.
; STREET: 500 Arcola Rd. 3C43
; CITY: Collegeville
; STATE: PA
; COUNTRY: USA
; ZIP: 19426
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/128,449A
; FILING DATE: 23-Apr-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Fehlner Ph.D., Paul F.
; REGISTRATION NUMBER: 35,135
; REFERENCE/DOCKET NUMBER: A2582-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (610)454-3839
; TELEFAX: (610)454-3808
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "Oligonucleotide"
; SEQUENCE DESCRIPTION: SEQ ID NO: 21:
US-10-128-449A-21

Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1109 GACTCTCCAGGAGACTGAA 1126
Db 1 GACACTCCAGGAGACTGAA 18

RESULT 1042
US-10-349-143-4602/c
; Sequence 4602, Application US/10349143
; Publication No. US2004000558A1
; GENERAL INFORMATION:
; APPLICANT: Cohen, Daniel
; APPLICANT: Blumenfeld, Marita
; APPLICANT: Chumakov, Ilya
; TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
; FILE REFERENCE: GENST 0206C1
; CURRENT APPLICATION NUMBER: US/10/349,143
; CURRENT FILING DATE: 2003-01-21
; PRIOR APPLICATION NUMBER: US/09/422,978
; PRIOR FILING DATE: 1999-10-20
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 09/298,850
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-04-21
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/109,732
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-11-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/082,614
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-21
; NUMBER OF SEQ ID NOS: 11796
; SEQ ID NO 4602
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..19
```

```
OTHER INFORMATION: upstream amplification primer 99-16221 for SEQ 668,
US-10-349-143-4602
;
; Query Match 0.1%; Score 14.8; DB 1; Length 19;
; Best Local Similarity 88.9%; Pred. No. 6.8e+02;
; Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 471 AAACCAAGAACTCTGAG 488
Db 18 AAACCAAGAACTCTTGG 1

RESULT 1043
US-10-294-228-31
; Sequence 31, Application US/10294228
; Publication No. US20040018176A1
; GENERAL INFORMATION:
; APPLICANT: Tolentino, Michael J.
; APPLICANT: Reich, Samuel Jotham
; TITLE OF INVENTION: Compositions and Methods for siRNA
; TITLE OF INVENTION: Inhibition of Angiogenesis
; FILE REFERENCE: 43826-1
; CURRENT APPLICATION NUMBER: US/10/294,228
; CURRENT FILING DATE: 2002-11-14
; PRIOR APPLICATION NUMBER: US 60/398,417
; PRIOR FILING DATE: 2002-07-24
; NUMBER OF SEQ ID NOS: 80
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 31
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Targeting Sequence
; US-10-294-228-31

Query Match 0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 4559 GCATTGTTGTTCAGAGA 4576
Db 1 GCATTGTTGTTCAGAGA 18

RESULT 1044
US-10-454-663-43
; Sequence 43, Application US/10454663
; Publication No. US2004003977A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Christopher K. Mirabelli
; TITLE OF INVENTION: OLIGONUCLEOTIDE MODULATION OF CELL ADHESION
; FILE REFERENCE: ISPH-0744
; CURRENT APPLICATION NUMBER: US/10/454,663
; CURRENT FILING DATE: 2003-06-04
; PRIOR APPLICATION NUMBER: 09/982,262
; PRIOR FILING DATE: 2001-10-18
; PRIOR APPLICATION NUMBER: 09/659,288
; PRIOR FILING DATE: 2000-09-12
; PRIOR APPLICATION NUMBER: 09/128,496
; PRIOR FILING DATE: 1998-08-03
; PRIOR APPLICATION NUMBER: 08/440,740
; PRIOR FILING DATE: 1995-05-12
; PRIOR APPLICATION NUMBER: 08/063,167
; PRIOR FILING DATE: 1993-05-17
; PRIOR APPLICATION NUMBER: 07/969,151
; PRIOR FILING DATE: 1993-02-10
; PRIOR APPLICATION NUMBER: 08/007,997
; PRIOR FILING DATE: 1993-01-21
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 43
; LENGTH: 19
```



```
;; TYPE: DNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Antisense Oligonucleotide
US-10-454-663-43

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      1141 CTGACCAAAATATCCAG 1158
DB      1 CTGACCAAGATATCTAGA 18

RESULT 1045
US-10-798-090-1
; Sequence 1, Application US/10798090
; Publication No. US20050014172A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Muscarinic Colnergic
; TITLE OF INVENTION: Receptor Gene Expression Using Short Interfering Nucleic Acid
; TITLE OF INVENTION: (sina)
; FILE REFERENCE: 400/147 (MEHB04-183)
; CURRENT FILING DATE: 2004-03-11
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-10-23
; PRIOR FILING DATE: 2003-10-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-03-11
; PRIOR FILING DATE: 2002-06-06
; PRIOR FILING DATE: 2002-06-06
; PRIOR FILING DATE: 2002-08-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 304
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 1
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/sina sense
US-10-798-090-1

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

OY      3990 ACCTTGACCAAGAACT 4007
DB      2 ACCUGCACAUAACACAGU 19

RESULT 1046
US-10-798-090-100/c
; Sequence 100, Application US/10798090
; Publication No. US20050014172A1
```

```
;; GENERAL INFORMATION:
;; APPLICANT: Sirna Therapeutics, Inc.
;; APPLICANT: McSwiggen, James
;; APPLICANT: Richards, Ivan
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Muscarinic Colnergic
;; TITLE OF INVENTION: Receptor Gene Expression Using Short Interfering Nucleic Acid
;; TITLE OF INVENTION: (sina)
;; FILE REFERENCE: 400/147 (MEHB04-183)
;; CURRENT FILING DATE: US/10798, 090
;; CURRENT FILING DATE: 2004-03-11
;; PRIOR FILING DATE: 2004-01-14
;; PRIOR FILING DATE: 2004-01-14
;; PRIOR FILING DATE: 2003-11-24
;; PRIOR FILING DATE: 2003-11-24
;; PRIOR FILING DATE: 2003-10-23
;; PRIOR FILING DATE: 2003-10-23
;; PRIOR FILING DATE: 2003-05-23
;; PRIOR FILING DATE: 2003-05-23
;; PRIOR FILING DATE: 2003-02-20
;; PRIOR FILING DATE: 2003-02-20
;; PRIOR FILING DATE: 2003-02-20
;; PRIOR FILING DATE: 2003-02-20
;; PRIOR FILING DATE: 2003-02-20
;; PRIOR FILING DATE: 2002-02-20
;; PRIOR FILING DATE: 2002-02-20
;; PRIOR FILING DATE: 2002-03-11
;; PRIOR FILING DATE: 2002-03-11
;; PRIOR FILING DATE: 2002-06-06
;; PRIOR FILING DATE: 2002-06-06
;; PRIOR FILING DATE: 2002-08-29
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 304
;; SOFTWARE: PatentIn version 3.3
;; SEQ ID NO 100
;; LENGTH: 19
;; TYPE: RNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: sina antisense region
US-10-798-090-100

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      3990 ACCTTGACCAAGAACT 4007
DB      18 ACCTTGACCAATTAACAGT 1

RESULT 1047
US-10-758-451-976
; Sequence 976, Application US/10758451
; Publication No. US20050014711A1
; GENERAL INFORMATION:
; APPLICANT: East Carolina University
; TITLE OF INVENTION: COMPOSITION, FORMULATION & METHOD FOR PREVENTION & TREATMENT OF D1
; TITLE OF INVENTION: AND CONDITIONS ASSOCIATED WITH BRONCHOCONSTRICTION, ALLERGY (IES)
; FILE REFERENCE: 30775-706 301
; CURRENT FILING DATE: US/10758, 451
; CURRENT FILING DATE: 2004-01-14
; PRIOR FILING DATE: 09/093, 972
; PRIOR FILING DATE: 1998-06-09
; NUMBER OF SEQ ID NOS: 996
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 976
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-758-451-976

Query Match      0.1%; Score 14.8; DB 1; Length 19;
```

[illegible]

```

RESULT 1048
US-10-923-115-31
; Sequence 31, Application US/10923115
; Publication No. US20050079610A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: Polisky, Barry
; APPLICANT: McSwigen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of FOS Gene Expression
; FILE REFERENCE: 400/193 (MBHB03-194-A)
; CURRENT FILING DATE: US/10/923,115
; PRIOR APPLICATION NUMBER: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/05162
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 358
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-115-31

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

OY      1626 GAGCAGTTAACTCCAGAA 1643
Db      1 GAACAGUUAUCCAGAA 18
      |||||:|||||
      1 GAACAGUUAUCCAGAA 18

RESULT 1049
US-10-923-115-147/C
; Sequence 147, Application US/10923115
; Publication No. US20050079610A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: Polisky, Barry
; APPLICANT: McSwigen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of FOS Gene Expression
; FILE REFERENCE: 400/193 (MBHB03-194-A)
; CURRENT FILING DATE: US/10/923,115
; PRIOR APPLICATION NUMBER: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/05162
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 358
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-115-31

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

OY      1626 GAGCAGTTAACTCCAGAA 1643
Db      1 GAACAGUUAUCCAGAA 18
      |||||:|||||
      1 GAACAGUUAUCCAGAA 18

RESULT 1049
US-10-923-115-147/C
; Sequence 147, Application US/10923115
; Publication No. US20050079610A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: Polisky, Barry
; APPLICANT: McSwigen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of FOS Gene Expression
; FILE REFERENCE: 400/193 (MBHB03-194-A)
; CURRENT FILING DATE: US/10/923,115
; PRIOR APPLICATION NUMBER: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/05162
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 358
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-115-31

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

OY      1626 GAGCAGTTAACTCCAGAA 1643
Db      1 GAACAGUUAUCCAGAA 18
      |||||:|||||
      1 GAACAGUUAUCCAGAA 18

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? FILE REFERENCE: 400/193 (MBHB03-194-A)
? CURRENT APPLICATION NUMBER: US/10/923,115
? PRIOR FILING DATE: 2004-08-20
? PRIOR APPLICATION NUMBER: PCT/US 03/05162
? PRIOR FILING DATE: 2003-02-20
? PRIOR APPLICATION NUMBER: PCT/US 04/16390
? PRIOR FILING DATE: 2004-05-24
? PRIOR APPLICATION NUMBER: US 10/826,966
? PRIOR FILING DATE: 2004-04-16
? PRIOR APPLICATION NUMBER: US 10/757,803
? PRIOR FILING DATE: 2004-01-14
? PRIOR APPLICATION NUMBER: US 10/720,448
? PRIOR FILING DATE: 2003-11-24
? PRIOR APPLICATION NUMBER: US 10/693,059
? PRIOR FILING DATE: 2003-10-23
? PRIOR APPLICATION NUMBER: US 10/444,853
? PRIOR FILING DATE: 2003-05-23
? PRIOR APPLICATION NUMBER: PCT/US03/05346
? PRIOR FILING DATE: 2003-02-20
? PRIOR APPLICATION NUMBER: PCT/US03/05028
? PRIOR FILING DATE: 2003-02-20
? PRIOR APPLICATION NUMBER: US 60/358,580
? PRIOR FILING DATE: 2002-02-20
? Remaining Prior Application data removed - See File Wrapper or PALM.
? NUMBER OF SEQ ID NOS: 358
? SOFTWARE: PatentIn version 3.2
? SEQ ID NO 147
? LENGTH: 19
? TYPE: RNA
? ORGANISM: Artificial Sequence
? FEATURE:
? OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
? US-10-923-115-147

```

```

Query Match Summary      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity   88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1626 GAGCAGTTACTCCAGAA 1643
      |||||||
Db      19 GAACGTTATCTCCAGAA 2

RESULT 1050
US-10-783-128-275/c
Sequence 275, Application US/10783128
Publication No. US20050096284A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: Mcswiggen, James
TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (PolyQ) Repeat Expansion Diseases Using Short Interfering Nucleic Acid (siNA)
FILE REFERENCE: 04-105 (400.146)
CURRENT APPLICATION NUMBER: US/10/783,128
CURRENT FILING DATE: 2004-02-20
PRIOR APPLICATION NUMBER: US 10/757,803
PRIOR FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US 10/720,448
PRIOR FILING DATE: 2003-11-24
PRIOR APPLICATION NUMBER: US 10/693,059
PRIOR FILING DATE: 2003-10-23
PRIOR APPLICATION NUMBER: US 10/444,853
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: US 10/652,791
PRIOR FILING DATE: 2003-03-29
PRIOR APPLICATION NUMBER: US 10/422,704
PRIOR FILING DATE: 2003-04-24
PRIOR APPLICATION NUMBER: US 10/417,012
PRIOR FILING DATE: 2003-04-16
PRIOR APPLICATION NUMBER: PCT/US03/05346
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: PCT/US03/05028
PRIOR FILING DATE: 2003-02-20

```

```
;; PRIOR APPLICATION NUMBER: US 60/358,580
;; PRIOR FILING DATE: 2002-02-20
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 3577
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 275
;; LENGTH: 19
;; TYPE: RNA
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re
US-10-783-128-275
```

```
Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      299 GGCTGAGAGTTCAGTGG 316
Db      19 GGCTGAGAGATCCAAATGG 2
```

```
RESULT 1051
US-10-783-128-276/c
; Sequence 276, Application US/10783128
; Publication No. US20050096284A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James.
; TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (polyQ) Repe
; FILE REFERENCE: 04-105 (400.146)
; CURRENT FILING DATE: 2004-02-20
; PRIOR APPLICATION NUMBER: US 10/783,128
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-03-29
; PRIOR APPLICATION NUMBER: US 10/652,791
; PRIOR FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3577
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 276
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re
US-10-783-128-276
```

```
Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      299 GGCTGAGAGTTCAGTGG 316
Db      18 GGCTGAGAGATCCAAATGG 1
```

```
RESULT 1052
US-10-783-128-2027
; Sequence 2027, Application US/10783128
; Publication No. US20050096284A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James.
; TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (polyQ) Repe
; FILE REFERENCE: 04-105 (400.146)
; CURRENT FILING DATE: 2004-02-20
; PRIOR APPLICATION NUMBER: US 10/783,128
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/652,791
; PRIOR FILING DATE: 2003-03-29
; PRIOR APPLICATION NUMBER: US 10/422,704
; PRIOR FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3577
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2027
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-783-128-2027
```

```
Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
```

```
Qy      299 GGCTGAGAGTTCAGTGG 316
Db      1 GGCTGAGAGATCCAAATGG 18
```

```
RESULT 1053
US-10-783-128-2028
; Sequence 2028, Application US/10783128
; Publication No. US20050096284A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James.
; TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (polyQ) Repe
; FILE REFERENCE: 04-105 (400.146)
; CURRENT FILING DATE: 2004-02-20
; PRIOR APPLICATION NUMBER: US 10/783,128
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
```

OTHER INFORMATION: Description of Artificial Sequence: sRNA antisense region  
US-10-922-544-150

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 72.2%; Pred. No. 6.8e+02;  
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

OY 299 GCGTGAAGTTCCTGCG 316  
DB 2 GCGCAGAGAUCCAUUG 19

RESULT 1054  
US-10-922-544-150/c  
Sequence 150, Application US/10922544  
Publication No. US20050153915A1  
GENERAL INFORMATION:  
APPLICANT: Uman, Nessim  
APPLICANT: McSwigen, James  
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response  
FILE REFERENCE: 400/204 (MHB03-939-B)  
CURRENT APPLICATION NUMBER: US/10/922,544  
PRIOR FILING DATE: 2004-08-19  
PRIOR APPLICATION NUMBER: US 60/512,701  
PRIOR FILING DATE: 2003-10-20  
PRIOR APPLICATION NUMBER: PCT/US04/16390  
PRIOR FILING DATE: 2004-05-24  
PRIOR APPLICATION NUMBER: US 10/826,966  
PRIOR FILING DATE: 2004-04-16  
PRIOR APPLICATION NUMBER: US 10/757,803  
PRIOR FILING DATE: 2004-01-14  
PRIOR APPLICATION NUMBER: US 10/720,448  
PRIOR FILING DATE: 2003-11-24  
PRIOR APPLICATION NUMBER: US 10/693,059  
PRIOR FILING DATE: 2003-11-23  
PRIOR APPLICATION NUMBER: US 10/444,853  
PRIOR FILING DATE: 2003-05-23  
PRIOR APPLICATION NUMBER: PCT/US03/05346  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: PCT/US03/05028  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: US 60/358,580  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 474  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 150  
LENGTH: 19  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/sRNA sense region  
US-10-922-544-150

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 6.8e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 902 AGCCATCTGCAAGAGCA 919  
DB 19 AGCCATCTGCAAGAGCGCA 2

RESULT 1055  
US-10-922-544-324  
Sequence 324, Application US/10922544  
Publication No. US20050153915A1  
GENERAL INFORMATION:  
APPLICANT: Uman, Nessim  
APPLICANT: McSwigen, James  
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Early Growth Response  
FILE REFERENCE: 400/204 (MHB03-939-B)  
CURRENT APPLICATION NUMBER: US/10/922,544  
PRIOR FILING DATE: 2004-08-19  
PRIOR APPLICATION NUMBER: US 60/512,701  
PRIOR FILING DATE: 2003-10-20  
PRIOR APPLICATION NUMBER: PCT/US04/16390  
PRIOR FILING DATE: 2004-05-24  
PRIOR APPLICATION NUMBER: US 10/826,966  
PRIOR FILING DATE: 2004-04-16  
PRIOR APPLICATION NUMBER: US 10/757,803  
PRIOR FILING DATE: 2004-01-14  
PRIOR APPLICATION NUMBER: US 10/720,448  
PRIOR FILING DATE: 2003-11-24  
PRIOR APPLICATION NUMBER: US 10/693,059  
PRIOR FILING DATE: 2003-11-23  
PRIOR APPLICATION NUMBER: US 10/444,853  
PRIOR FILING DATE: 2003-05-23  
PRIOR APPLICATION NUMBER: PCT/US03/05346  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: PCT/US03/05028  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: US 60/358,580  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 474  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 324  
LENGTH: 19  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: sRNA antisense region  
US-10-922-544-324

Query Match 0.1%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 6.8e+02;  
Matches 15; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 902 AGCCATCTGCAAGAGCA 919  
DB 1 AGCCATCTGCAAGAGCGCA 18

RESULT 1056  
US-10-923-522-263  
Sequence 263, Application US/10923522  
Publication No. US20050153915A1  
GENERAL INFORMATION:  
APPLICANT: Uman, Nessim  
APPLICANT: McSwigen, James  
APPLICANT: Chowitra, Bharat

```
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Chromosome Translocation
FILE OF INVENTION: Gene Expression Using Short Interfering Nucleic Acid (siNA)
CURRENT APPLICATION NUMBER: US/10/923,522
CURRENT FILING DATE: 2004-08-20
PRIOR APPLICATION NUMBER: PCT/US 03/05234
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 60/439,922
PRIOR FILING DATE: 2003-01-14
PRIOR APPLICATION NUMBER: US 60/404,039
PRIOR FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: PCT/US 04/16390
PRIOR FILING DATE: 2004-05-24
PRIOR APPLICATION NUMBER: US 10/826,966
PRIOR FILING DATE: 2004-04-16
PRIOR APPLICATION NUMBER: US 10/757,803
PRIOR FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: PCT/US03/05346
PRIOR FILING DATE: 2003-11-24
PRIOR APPLICATION NUMBER: US 10/693,059
PRIOR FILING DATE: 2003-10-23
PRIOR APPLICATION NUMBER: US 10/444,853
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: PCT/US03/05346
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1779
SOFTWARE: PatentIn version 3.3
SEQ ID NO 263
LENGTH: 19
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-522-263

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 61.1%; Pred. No. 6.8e+02;
Matches 11; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy      387 CTCTGCAGCTTCATCTCG 404
Db      2 CGCUGCGUCUACUCCUG 19

RESULT 1057
US-10-923-522-526/c
Sequence 526, Application US/10923522
Publication No. US20050159381A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwigen, James
APPLICANT: Chowitra, Bharat
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Chromosome Translocation
FILE OF INVENTION: Gene Expression Using Short Interfering Nucleic Acid (siNA)
CURRENT APPLICATION NUMBER: US/10/923,522
CURRENT FILING DATE: 2004-08-20
PRIOR APPLICATION NUMBER: PCT/US 03/05234
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 60/439,922
PRIOR FILING DATE: 2003-01-14
PRIOR APPLICATION NUMBER: US 60/404,039
PRIOR FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: PCT/US 04/16390
PRIOR FILING DATE: 2004-05-24
PRIOR APPLICATION NUMBER: US 10/826,966
PRIOR FILING DATE: 2004-04-16
PRIOR APPLICATION NUMBER: US 10/757,803
PRIOR FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US 10/720,448
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PRIOR FILING DATE: 2003-11-24
PRIOR APPLICATION NUMBER: US 10/693,059
PRIOR FILING DATE: 2003-10-23
PRIOR APPLICATION NUMBER: US 10/444,853
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: PCT/US03/05346
PRIOR FILING DATE: 2003-02-20
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1779
SOFTWARE: PatentIn version 3.3
SEQ ID NO 526
LENGTH: 19
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-522-526

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      387 CTCTGCAGCTTCATCTCG 404
Db      18 CGCTGCTGCTTCATCTCG 1

RESULT 1058
US-10-918-896-65/c
Sequence 65, Application US/10918896
Publication No. US20050164966A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwigen, James
APPLICANT: Chowitra, Bharat
APPLICANT: Beigelman, Leo
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Type 1 Insulin-like
FILE OF INVENTION: Growth Factor Receptor (IGF-1R) Gene Expression Using Short
FILE REFERENCE: 400/203 (MBHB03-195-B)
CURRENT APPLICATION NUMBER: US/10/918,896
CURRENT FILING DATE: 2004-08-16
PRIOR APPLICATION NUMBER: PCT/US03/05044
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: PCT/US04/16390
PRIOR FILING DATE: 2004-05-24
PRIOR APPLICATION NUMBER: US 10/826,966
PRIOR FILING DATE: 2004-04-16
PRIOR APPLICATION NUMBER: US 10/757,803
PRIOR FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US 10/720,448
PRIOR FILING DATE: 2003-11-24
PRIOR APPLICATION NUMBER: US 10/693,059
PRIOR FILING DATE: 2003-11-23
PRIOR APPLICATION NUMBER: US 10/444,853
PRIOR FILING DATE: 2003-05-23
PRIOR APPLICATION NUMBER: PCT/US03/05346
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: PCT/US03/05028
PRIOR FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 60/358,580
PRIOR FILING DATE: 2002-02-20
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 680
SOFTWARE: PatentIn version 3.3
SEQ ID NO 65
LENGTH: 19
TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-918-896-65
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Query Match 0.1%: Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 6.8e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 378 GTTCCAGCTCTGACG 395  
DB 19 GTTCCAGCTCTGACG 2

RESULT 1059  
US-10-918-896-342  
; Sequence 342, Application US/10918896  
; Publication No. US20050164966A1  
; GENERAL INFORMATION:  
; APPLICANT: Sigma Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leo  
; APPLICANT: Chowitra, Bharat  
; TITLE OF INVENTION: RNA interference Mediated Inhibition of Type 1 Insulin-like  
; TITLE OF INVENTION: Growth Factor Receptor (IGF-1R) Gene Expression Using Short  
; TITLE OF INVENTION: Interfering Nucleic Acid (siNA)  
; FILE REFERENCE: 400/203 (MBH03-195-B)  
; CURRENT FILING DATE: 2004-08-16  
; PRIOR APPLICATION NUMBER: US/10/918,896  
; PRIOR APPLICATION NUMBER: PCT/US03/05044  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: US 60/358,580  
; PRIOR FILING DATE: 2002-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 680  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 342  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-918-896-342

Query Match 0.1%: Score 14.8; DB 1; Length 19;  
Best Local Similarity 66.7%; Pred. No. 6.8e+02;  
Matches 12; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 378 GTTCCAGCTCTGACG 395  
DB 1 GTTCCAGCTCTGACG 18

RESULT 1060  
US-10-919-866-1  
; Sequence 1, Application US/10919866  
; Publication No. US2005017664A1  
; GENERAL INFORMATION:  
; APPLICANT: Sigma Therapeutics, Inc.  
; APPLICANT: Richards, Ivan  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: RNA interference Mediated Inhibition Of Cholinergic Muscarinic

; TITLE OF INVENTION: Receptor (CHRM3) Gene Expression Using Short Interfering Nucleic  
; FILE REFERENCE: 400/205 (MBH04-183-A)  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: US/10/919,866  
; PRIOR FILING DATE: 2004-03-11  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: US 60/358,580  
; PRIOR FILING DATE: 2002-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 324  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 1  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re

Query Match 0.1%: Score 14.8; DB 1; Length 19;  
Best Local Similarity 72.2%; Pred. No. 6.8e+02;  
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 3990 ACCTTGACAGACAGT 4007  
DB 2 ACCUCCAGCAUACAGU 19

RESULT 1061  
US-10-919-866-100/c  
; Sequence 100, Application US/10919866  
; Publication No. US2005017664A1  
; GENERAL INFORMATION:  
; APPLICANT: Sigma Therapeutics, Inc.  
; APPLICANT: Richards, Ivan  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: RNA interference Mediated Inhibition Of Cholinergic Muscarinic  
; TITLE OF INVENTION: Receptor (CHRM3) Gene Expression Using Short Interfering Nucleic  
; FILE REFERENCE: 400/205 (MBH04-183-A)  
; CURRENT FILING DATE: 2004-08-17  
; PRIOR APPLICATION NUMBER: US/10/919,866  
; PRIOR FILING DATE: 2004-03-11  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23

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; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 324
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 100
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-516-100

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3990 ACCTTGACCAAGACAGT 4007
Db      18 ACCTTGACCAATACAGT 1

RESULT 1062
US-10-923-516-244/c
; Sequence 244, Application US/10923516
; Publication No. US20050176025A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: McSwigen, James
; TITLE OF INVENTION: RNA interference Mediated Inhibition of B-Cell CLL/Lymphoma-2
; FILE REFERENCE: 400/173 (MBH02-714-F)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,516
; PRIOR FILING DATE: 2003-02-18
; PRIOR APPLICATION NUMBER: PCT/US 03/04908
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: US 60/396,905
; PRIOR FILING DATE: 2002-05-24
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 882
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 244
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-516-244

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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QY      1587 TTGATTCGCGGATCATT 1604
Db      19 TTGATTCGCGGATCATT 2

RESULT 1063
US-10-923-516-658
; Sequence 658, Application US/10923516
; Publication No. US20050176025A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: McSwigen, James
; TITLE OF INVENTION: RNA interference Mediated Inhibition of B-Cell CLL/Lymphoma-2
; FILE REFERENCE: 400/173 (MBH02-714-F)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US 03/04908
; PRIOR FILING DATE: 2003-02-18
; PRIOR APPLICATION NUMBER: US 60/396,905
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: PCT/US 04/16390
; PRIOR FILING DATE: 2003-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 882
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 658
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-516-658

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 50.0%; Pred. No. 6.8e+02;
Matches 9; Conservative 7; Mismatches 2; Indels 0; Gaps 0;

QY      1587 TTGATTCGCGGATCATT 1604
Db      1 TUGAUCUCGCGGUCAUU 18

RESULT 1064
US-10-824-036-275/c
; Sequence 275, Application US/10824036
; Publication No. US20050191638A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: McSwigen, James
; TITLE OF INVENTION: RNA interference Mediated Treatment of Polyglutamine (PolyQ) Repeat
; FILE REFERENCE: 04-105 (400.146)
; CURRENT FILING DATE: 2004-04-14
; PRIOR APPLICATION NUMBER: US/10/824,036
; PRIOR FILING DATE: 2004-01-14
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; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/652,791
; PRIOR FILING DATE: 2003-03-29
; PRIOR APPLICATION NUMBER: US 10/422,704
; PRIOR FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3581
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 275
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense re
US-10-824-036-275

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      299 GGCTGAGAGTTCAGTGG 316
Db      19 GGCTGAGAGATCCATGG 2

RESULT 1065
US-10-824-036-276/c
; Sequence 276, Application US/10824036
; Publication No. US20050191638A1
; GENERAL INFORMATION:
; APPLICANT: MesVigen, James
; TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (PolyQ) Repet
; FILE REFERENCE: 04-105 (400.146)
; CURRENT APPLICATION NUMBER: US/10/824,036
; CURRENT FILING DATE: 2004-04-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/652,791
; PRIOR FILING DATE: 2003-03-29
; PRIOR APPLICATION NUMBER: US 10/422,704
; PRIOR FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3581
; SOFTWARE: PatentIn version 3.1
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; SEQ ID NO 276
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense reg
US-10-824-036-276

Query Match      0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY      299 GGCTGAGAGTTCAGTGG 316
Db      1  GCGGAGAGCAUCCAUCCG 18

RESULT 1067
US-10-824-036-2028
; Sequence 2028, Application US/10824036
; Publication No. US20050191638A1
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; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; TITLE OF INVENTION: RNA Interference Mediated Treatment of Poly[utamine (polyU) Repetitive
; FILE REFERENCE: 04-105 (400.146)
; CURRENT APPLICATION NUMBER: US/10/824,036
; PCT APPLICATION NUMBER: US 10/757,803
; PRIORITY DATE: 2004-01-14
; PRIORITY APPLICATION NUMBER: US 10/720,448
; PRIORITY DATE: 2003-11-24
; PRIORITY APPLICATION NUMBER: US 10/693,059
; PRIORITY DATE: 2003-10-23
; PRIORITY APPLICATION NUMBER: US 10/444,853
; PRIORITY DATE: 2003-05-23
; PRIORITY APPLICATION NUMBER: US 10/652,791
; PRIORITY DATE: 2003-03-29
; PRIORITY APPLICATION NUMBER: US 10/422,704
; PRIORITY DATE: 2003-04-24
; PRIORITY APPLICATION NUMBER: US 10/417,012
; PRIORITY DATE: 2003-04-16
; PRIORITY APPLICATION NUMBER: PCT/US03/05346
; PRIORITY DATE: 2003-02-20
; PRIORITY APPLICATION NUMBER: PCT/US03/05028
; PRIORITY DATE: 2003-02-20
; PRIORITY APPLICATION NUMBER: US 60/358,580
; PRIORITY DATE: 2002-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 3581
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2028
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-824-036-2028

Query Match          0.1%; Score 14.8; DB 1; Length 19;
Best Local Similarity 72.2%; Pred. No. 6.8e+02;
Matches 13; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Oy      299 GCGTGAGAGTTCAGTGG 316
      |||:|||||:||||:|
Db      2 GCGUGAGAUCCAUGC 19
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Search completed: October 5, 2005, 10:50:28  
Job time : 205 secs